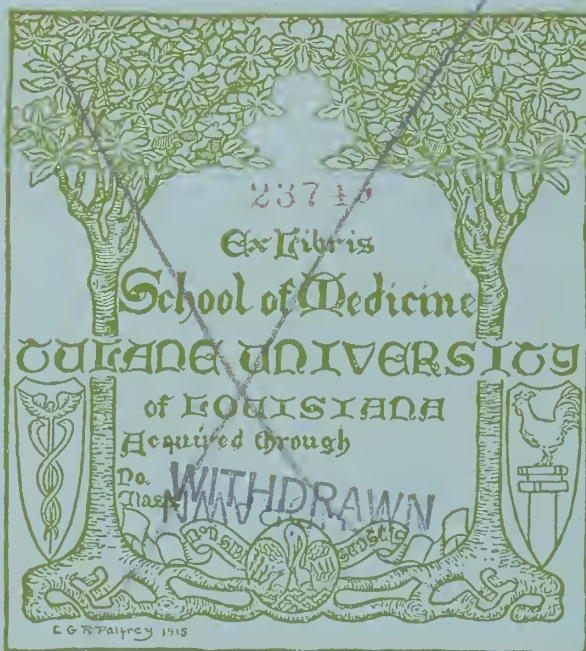


HEALTH SCIENCES LIBRARY
UNIVERSITY OF MARYLAND
BALTIMORE

HEALTH SCIENCES LIBRARY
UNIVERSITY OF MARYLAND
BALTIMORE





THE JOURNAL

OF THE

Indiana State Medical Association

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

Issued Monthly
Under the Direction of the Council

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.
Editor and Manager

OFFICE OF PUBLICATION
406 West Berry Street - - - - - Fort Wayne, Indiana

INDEX TO VOL. XVI.
January to December, Inclusive, 1923

HEALTH SCIENCES LIBRARY
UNIVERSITY OF MARYLAND
BALTIMORE

5-2-31/10

18993
2

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XVI

JANUARY 15, 1923

NUMBER 1

ORIGINAL ARTICLES

SENSITIVITY TO EPIDERMAL AND POLLEN PROTEINS: DIAGNOSIS AND TREATMENT*

JAMES A. WYNN, M.D.
INDIANAPOLIS

Some clinical evidences of the state of sensitivity to foreign proteins have long been recognized as fairly typical syndromes. Bostock¹ described hay fever as early as 1819, and Blackley² seventy years later not only recognized the relation of pollens to the condition, but actually succeeded in performing the skin test much as it is done today. He also observed patients with hay fever when around animals (dog, cat, and even guinea pig), but he falsely attributed the condition to the pollens, reasoning that the frequenting of barns and hay mows by animals would account for the presence of pollens in their fur. Curtis³ in 1900 began the first attempt to treat hay fever specifically, using whole plant extracts to produce active immunity, and Dunbar⁴ five years later went a step further in using pollens for extracts instead of the whole plant.

Meanwhile occasional isolated observations were being recorded regarding a peculiar reaction of animals to subcutaneously injected proteins. In 1839 Magendie⁵ found that dogs became desperately sick and died following a second injection of albumen. In 1894 Flexner⁶ observed that dog serum injected similarly had the same effect. Richet⁷ first called the phenomenon anaphylaxis in 1902. Meltzer⁸ thirteen years ago noted that in bronchial asthma (of some types at least) and anaphylactic shock, dyspnea was due to tonic stenosis of the bronchioles, relief being secured by a vagus release dose of atropin. It remained for Walker of Boston to put the treatment of both hay fever and the asthmas of protein origin on a sound, practical basis. This has been definitely accomplished after years of painstaking work in the

asthma laboratory of the Peter Bent Brigham Hospital.

It is not the aim of this paper to announce any original ideas regarding cases of sensitivity, but rather to outline briefly my technique in handling sensitive hay fever and asthma patients, a technique evolved after a year and a half of work in Walker's laboratory.

SIGNIFICANCE OF THE STATE OF SENSITIVENESS: From our point of view it is unnecessary to go into an extensive discussion of the principles of immunology. Suffice it to say, in the state of sensitiveness to a given protein the patient has a predominance of fixed cellular antibodies to that protein or antigen. That these are fixed predominantly in the cells and not in the circulatory stream seems clear from the fact that complement fixation has failed to show them in the blood. On the other hand, when desensitization has been accomplished (by some such method as that described later) circulating antibodies are present in sufficient number, according to Rackemann⁹, to prevent the development of the clinical phenomena of sensitiveness. This is Rackemann's view of what he describes as an interesting relationship of sensitive and immune states—predominant fixed cellular antibodies in one case and circulating ones in the other. Whether this is an accurate interpretation is still questionable, for as careful a worker as Walker has been unable to demonstrate serum antibodies in patients successfully desensitized with various food and dandruff proteins¹⁰.

CLINICAL EVIDENCES OF SENSITIVITY: It is probable that there are many evidences of sensitivity which we are not yet trained to appreciate. However, we recognize at present a few fairly typical clinical reactions. The commoner symptoms may be grouped as nasal, bronchiolar, and cutaneous.

(a) *Nasal Symptoms:* When exposed to the specific antigen, as during pollen season, many patients suffer almost continually with paroxysms of sneezing and running of the eyes and nose. If the trouble is seasonal it is commonly recognized as hay fever and is usually due to timothy or a variety of ragweed, depending on whether it occurs in May or August.

(*) Presented before the Section on Medicine of the Indiana State Medical Association at the Muncie session, September, 1922.

Other patients complain of hay-fever-like trouble which may be perennial or absolutely irregular in occurrence. Epidermal or food proteins cases may present such pictures.

(b) *Bronchiolar Symptoms*: Some seasonal hay fever patients develop toward the end of the season asthmatic paroxysms. Others with none of the usual hay fever symptoms have repeated attacks of bronchial asthma all during pollen season. Finally, some sensitive patients are subject to asthmatic spells perennially or at quite irregular intervals.

The clinical features of these attacks are an onset that is usually sudden, severe expiratory dyspnea, readily audible squeaks and groans, and often a very distressing cough.

(c) *Cutaneous Symptoms*: The cutaneous evidences of the sensitive state are usually urticarial or eczematous. A very important group of food cases may present either general type of symptoms. Skin symptoms are not common in patients sensitive to epidermal or pollen proteins alone. I have seen only urticarial symptoms in this group. Two cases are illustrative:

Case I: A twenty-seven year old laboratory assistant had chronic urticaria for several weeks while working about a Wassermann laboratory and animal room. Skin tests were all negative except for guinea pig hair. He was transferred to work in another department, and the urticaria disappeared with the removal of the cause.

Case II: A twenty-nine year old laboratory assistant never had hay fever or asthma, but a severe urticaria all during the weeks when pollen was being separated in the laboratory—never at any other time. Skin tests were all negative except for dwarf ragweed.

DETERMINATION OF THE OFFENDING PROTEINS: History: Given in some particular case any one or several of the previously described evidences of sensitivity, one is confronted with the necessity of finding the offending protein or proteins. In arriving at an accurate etiological diagnosis, a carefully taken history is one of the greatest helps. If the symptoms are perennial and the duration dates from young adult life or childhood, one's attention is immediately directed toward the foods. If the trouble is strictly seasonal, pollens at once present themselves as the most likely cause. The ragweed varieties pollinate usually from the middle of August to frost; timothy during May and early June. There are a few other air-borne pollens which must be considered in a complete case study, but they are of no great practical importance in Indiana.

In cases where symptoms occur at quite irregular intervals one may have to make a most thorough study of environment, personal habits and occupation of the patient to get at the real cause. Such study is often richly rewarded. The history, if one takes pains to obtain it fully, is almost diagnostic in feather and horse,

dog and cat dandruff cases. How critical one's study of these obscure cases must sometimes be is well illustrated by an irregular asthma seen about a year ago. Attacks were finally traced to the use of a particular pepper which, though essentially a volatile oil and an acrid resin in its own constitution, contained enough buckwheat as an impurity to cause the patient's symptoms. Subsequent studies showed the patient violently sensitive to buckwheat, and buckwheat alone.

Skin Test: Once a provisional diagnosis of cause has been made, it is possible to confirm or disprove it by several tests with the suspected protein. Various reactions of this sort have been described—among the commoner ones the conjunctival and intradermal reactions and the scratch test. The scratch test is by far the simplest. Though it is probably but a rough index of the degree of sensitivity, it has proved accurate enough to serve as a guide in treatment. Furthermore, if carefully controlled, it will not mislead one with false positives.

With a blunt scalpel a 0.5 cm. scratch is made just through the epidermis, not deep enough to draw blood. A convenient site is the flexor aspect of the fore-arm. The scratches should be at least 2 cm. apart if several proteins are to be tested. A drop of weak sodium hydroxid (N/10) solution is put on the scratch and a little of the protein is added to the drop and mixed. In twenty to thirty minutes there will develop at the scratch an urticarial wheal a centimeter or more in diameter, with surrounding redness, if the patient is sensitive to the protein used. Besides the test scratch it is important to make a second, leaving it blank, and to overlay a third with sodium hydroxid only. These two controls are necessary, since occasionally an individual will have such a sensitive skin that even the scratch alone, or the scratch plus the sodium hydroxid solution, will produce a wheal. Controls must remain negative before reactions with the proteins have any significance. The use of pure protein in the tests is preferable, but not always necessary. Some time ago, while quite a distance from the laboratory, I saw a patient in whom study suggested sensitivity to the epidermal protein of the guinea pig. Of course guinea pig dandruff protein was not available, but I could secure a guinea pig. A little of the hair (clipped close to the body) was applied in sodium hydrate solution to a test scratch, and twenty minutes was sufficient to give a definite positive.

Is a positive skin test a constant finding in the sensitive state, and is it ever present (with negative controls) in individuals with no clinical evidences of sensitivity? These are questions that cannot be finally answered now, in view of the meager statistical data at hand. Very rarely one does find a patient with history and clinical picture very strongly suggestive of

sensitivity to one of the common dandruffs or pollens, but with a negative skin test. It is possible that correct proteins have not been used in these cases. It is the impression of Walker, who worked with a very large number of sensitive patients, that a positive reaction (with negative controls) is rare in individuals with no clinical evidences of sensitivity. It is my hope in the course of the coming year to get definite statistics on this question in a considerable series of controls.

Treatment: In no cases more than those of the epidermal and pollen protein group must the physician "treat the patient rather than the disease". No patients require more careful individualizing than these.

Epidermal Protein Cases: The justifiability of desensitizing feather and hair cases with the specific antigen is still questionable. The degree of sensitivity is usually so great that the procedure calls for an almost endless number of injections. Then, too, the immunity developed is usually of only short duration—frequently only a few months. Fortunately, prophylactic treatment is usually satisfactory in this group. Discarding the feather pillow, giving up the family pets, or reasonable care in avoiding horses, will usually avail. The efficacy of preventive treatment is well evidenced in two recent cases.

Case III: An Indiana stock-farm owner gave a history of persistent sneezing spells and occasional asthmatic attacks at intervals of great frequency for the past four years, with no seasonal accentuation. Before the present trouble he had lived in Oklahoma and worked as a contractor. Examination was negative except for a strongly positive cattle hair scratch test and weaker positives with cat, dog and horse dandruff. His trouble stopped when he moved to town and left the overseeing of his farm to his son.

Case IV: A hospital orderly developed "hay fever" suddenly in late March. He had never had previous trouble and his attacks of sneezing were only in the mornings. Study of the case showed that he had recently been detailed to feed the animals in the laboratory stock room. The feeding hour was nine in the morning. Examination showed nothing but sensitivity to guinea pig hair. After being sent to other work he had no further trouble.

POLLEN PROTEIN CASES: The ideal treatment for patients sensitive to pollen is a change to pollen-free location during the flowering season of the particular weed or plant to which they are sensitive. However, this obviously cannot be done in all cases; and, fortunately, desensitization with the more important air-borne pollens can be pretty effectively accomplished.

(a) *Preparation of the Antigens:* As causes of hay fever or seasonal asthma in Indiana, timothy and the varieties of ragweed are the chief offenders. Golden-rod, sun-flower, daisy, aster—the plants oftenest incriminated by the laity—are quite harmless, their pollens not being to any great extent air-borne. However, proximity to golden-rod will often disturb ragweed patients, since golden-rod and ragweed, especially the dwarf (*Ambrosia Artemisiifolia*), frequent the same locations, and pollen of the latter frequently collects on the former.

In collecting pollen for antigen—*e. g.*, ragweed—considerable attention must be paid to what at first thought seems trivial details. The buds should be collected just as they are beginning to flower. To get relatively dust-free pollen one must select plants well removed from roads. It is well to pick shortly after noon on a sunny day, for the buds, if dry, are much less prone to become mouldy.

When the buds have been spread on clean paper and allowed to dry for ten to fourteen days, they are ground in a mortar and the pollen floated out with some liquid having about the same specific gravity as the pollen. Carbon tetrachloride is cheap and quite satisfactory. The pollen thus obtained is examined microscopically for moulds and gross impurities. If care has been exercised in collecting and drying, these will seldom be present; if they are, the pollen must be discarded. Pollen thus obtained is ready without further treatment for use in skin testing or in making up treatment dilutions.

Various dilutions of pollen in alcohol-saline solution can be based on total nitrogen fraction of the solution or weight of the pollen. The latter I have found entirely satisfactory and simpler than the former, though of course not as scientific. One gram of pollen extracted in 100 cc. of 12 percent alcohol-saline is the 1-100 dilution. From this, dilutions of 1-500, 1-1000, 1-5000, 1-10000, 1-20000, 1-40000, etc., are made up. These solutions, if they are made up sterile and a little thymol added, will keep several months in the ice box. Sterilization can be effected by the centrifuge or the Berkefeld filter.

(b) *The Technique of Treatment:* Desensitization is accomplished by giving repeated subcutaneous injections of a specific pollen extract in gradually increasing dose. By skin test the degree of sensitivity is first determined. For example, a given patient is sensitive to ragweed and has a positive skin test with dilutions 1-100, 1-500, 1-1000, 1-5000, 1-10000, but none with 1-20000. The first injection in such cases is usually 0.2 cc. of the next weaker dilution to the weakest one showing a positive skin test. So in this case 0.2 cc. of 1-20000 was the first dose. The complete treatment schedule follows:

Date	Ragweed	Minims	C.C.
April 25	1-20000	3	0.2
May 1	1-20000	5	0.3
May 7	1-10000	3	0.2
May 14	1-10000	5	0.3
May 21	1-5000	3	0.2
May 28	1-5000	5	0.3
June 3	1-5000	7	0.45
June 9	1-5000	9	0.6
June 16	1-1000	3	0.2
June 23	1-1000	5	0.3
June 30	1-500	3	0.2
July 5	1-500	5	0.3
July 11	1-500	7	0.45
July 18	1-500	9	0.6
July 25	1-500	11	0.75
August 1	1-100	3	0.2
August 8	1-100	5	0.3

A five to seven day treatment interval was used in this case, and two injections of 1-100 had been given before August 15th, *i. e.*, the treatment was strictly pre-seasonal, and in this case gave complete relief. Such a general plan of treatment as was used with this patient has proved effective in establishing a seasonal immunity in something over 80 percent of the cases in the Peter Bent Brigham Hospital hay fever and asthma clinic.

If pollen sensitivity in a given case manifests itself as asthma rather than hay fever, the same general plan of treatment is followed, but greater care must be taken in following these patients as they are often much more sensitive than the simple hay feverers. A type of patient requiring especially careful supervision is that in which hay fever is terminated by asthmatic attacks toward the end of the pollen season. Increase in dosage with these patients must be done with the greatest care. As the more concentrated solutions are reached in the schedule of treatment it is occasionally advisable to repeat the dose at the weekly interval before proceeding to the next greater concentration. Anything like a systemic reaction to treatment should call for such a precaution.

Certain modifications of this general plan of desensitization are still in the experimental stage. For example, the local application of pollen in varying concentration to the nasal membrane is being given a trial¹¹. Last fall Dr. Sidney Miller of Baltimore told me of an old preacher he had seen with the very alarming symptoms of acute anaphylaxis. After several stormy hours the old gentleman recovered enough to admit that his symptoms had developed after his drinking a home-made ragweed concoction for his hay fever. The interesting sequel to it all is, the old gentleman recovered from his acute upset and for the first time in many seasons had no hay fever the rest of the summer. Clinical evidence certainly would point to the establishment of an anti-anaphylactic state. Though treatment along these

lines probably has future possibilities, its value must be firmly established by the statistics of large clinics before general adoption. Indiscriminate experimenting with isolated cases can only lead to half-knowledge and trouble.

PRECAUTIONS IN TREATMENT: It is a not uncommon experience to encounter men who have failed in the use of what they believed to be a correct method of desensitization. A number of circumstances may account for these failures. They are important enough to warrant brief mention. In a certain small percentage treatment is ineffective, but failure is much more often due to lack of understanding of several technical points in treating. They may be briefly summarized:

(a) *Treatment During Pollen Season:* To get optimal results the full course of injections should be given before the pollen begins to be air-borne. While injections of the pollen antigen can be given during the pollen season, the procedure is not without danger except in the hands of the expert, and is only partially and uncertainly effective. The reason is obvious: during the season patients are constantly exposed to pollen in varying concentration. This air-borne antigen plus that given by injection may be at times quite overwhelming and produce very distressing symptoms.

(b) *Accuracy in Treatment:* Another essential to getting results is that one be perfectly accurate in dosage and regular with the treatment interval. Tuberculin syringes should be used. It is a waste of time and a dangerous experiment to work with patients who are habitually skipping treatments or coming in five or six days late for the injections. It is just as hazardous to try to save time by increasing the dose too rapidly. Finally, one must be certain of the quality of the antigen used. The safest way is to prepare it according to some such method as that described. Commercial preparations are, with a very few exceptions, unreliable. The indiscriminate giving of mixed pollen antigen has been shown by Walker and others to be utterly unscientific, without justification, and not without hazard. The fundamental axiom of any desensitizing program must be: use a specific antigen, and be sure to use the specific antigen to which the patient is sensitive.

(c) *Careful Supervision:* It need hardly be said that patients must be carefully questioned about the preceding week before each treatment, and examined if necessary. A few patients are extremely reactive to treatment. This need not occasion alarm if the fact is recognized, as it will be, from the questioning. The same dose is best repeated on such occasions. In short, there can be no slavish adherence to a fixed schedule. Slight variations must often be made to suit the individual case.

SUMMARY AND CONCLUSION

It has been pointed out that hay fever, certain forms of asthma, and various skin conditions are but different manifestations of the state of sensitivity to some protein or proteins. A general method has been outlined for differentiating these types on the basis of clinical history and the evidence of a specific skin reaction. Special attention has been directed to pollen and epidermal protein cases, to the fact that they give a seasonal history in one case and a history of proximity to a given animal or fowl in the other; that both types are best treated prophylactically by removal of cause, but that desensitization is possible and practical in case of the pollens. A method has been outlined and the precautions emphasized.

Though at present desensitization must be left to those especially prepared for the work, an effort has been made to point out the fact that, with reasonable attention to the subject, the general practitioner should not only recognize cases of sensitivity, but classify them with considerable accuracy and accordingly give intelligent advice regarding management. The condition is common enough and important enough to warrant the attention of all engaged in the general practice of medicine.

BIBLIOGRAPHY

- 1 Bestock, John: *Med. Chirurg. Trans.*, 1819, London, X, 161.
- 2 Blackleys: London, 1889, and *Brit. Med. Jour.* 1898, I, 867.
- 3 Curtis: quoted by Walker, J., A. M. A., lxix, 363-366, Aug. 4, 1917.
- 4 Dunbar, W. P.: *Berl. Klin. Woch.*, 1905, xlii, 797, 877, 915, 942, 1237.
- 5 Magendie, F.: *Verlesungen uber das Blut*, 1839.
- 6 Flexner: quoted by Walker. See above.
- 7 Richet, C., and Portier, P.: *C. R. de la Sec. Biol.*, 1902, liv, 170.
- 8 Meltzer: quoted by Walker. See above.
- 9 Rackemann, F.: *J. A. M. A.*, 78, 24, June 17, 1922.
- 10 Walker, I. C.: *Jour. Med. Research*, xxxi, 2, 243-266, May, 1917.
- 11 Mackenzie, M.: *J. A. M. A.*, 78:11, Mar. 18, 1922, 787.

DISCUSSION

DR. C. G. BEALL (Fort Wayne): It seems to me that our recognition of this state of sensitivity to proteins has been one of the most important steps in medicine in the last ten years. While the possibility has been recognized for many years, yet it is now on a much more definite basis than it was in the past. As Dr. Wynn indicated, a certain lead can be obtained from the patient's history; that is, as to whether the sensitivity is due to a certain weed or dandruff or food. This is true in some cases but my experience has been that the cases in which you can get definite leads are comparatively few. I mean taking all together the cases which we think may be due to this sensitivity. This includes hay fever, asthma, and certain conditions of the skin. In hay fever the lead is quite different, of course. In asthma it has been my experience that it is extremely difficult to get a definite lead in the history, so we must arbitra-

rily test out the possible proteins which can have a bearing on the disease. At present there is an increased number of substances that are recognized as possible factors in the production of asthma and in the production of certain skin diseases, such as eczema and chronic urticaria.

The idea of certain types of diseases being produced by proteins and other substances opens a wide field for speculation, and I believe from the experience thus far we will obtain some very definite results from it. We have been talking about proteins, but we are all familiar with individuals who have idiosyncracies to things other than proteins. I refer to quinin, belladonna, and so on. One instance which struck me as unusual was a patient who was sensitive to alcohol. The smallest amount ingested produced an urticaria, dyspnea, and severe gastric symptoms. This individual has died since the Volstead Act went into effect.

This subject is of great importance, and I would suggest that Dr. Wynn be requested each year to give us a summary of the results that have been obtained during the last year's work.

DR. CHAS. S. BOSENBURY (South Bend): Dr. Wynn's presentation has been that of one who has studied the subject intensively. What I have to say is based upon the experience of one who has attempted to do something with the problems of protein sensitization as a side line.

Historically, I think it is interesting to know that years ago the causes of bronchial asthma and hay fever were definitely described. If you will consult Pepper's *System of Medicine*, published in 1880, you will find two articles by Geddings. In one on bronchial asthma he mentions various foods and animal emanations as causes of asthma. The other article describes the early investigations which led to the conclusion that pollens are responsible for hay fever. He relates that his wife, who was a victim of the disease, precipitated an attack lasting for twenty-four hours merely by smelling some ragweed plants which he had preserved between the leaves of a book. There is also described a method of making skin tests which corresponds to that used today. All of this was over forty years ago, but it has been only in recent years that the profession has been actively interested in problems of protein sensitization.

If it is possible to get positive tests with foods or other substances in patients with bronchial asthma, then withdrawal of the offending proteins may give relief. However, for economical or other reasons it may be impossible for the patient to rid himself of offending proteins. Or you may fail to find any proteins responsible.

My results in the treatment of hay fever with pollen extracts may be briefly summed up: one-half the patients have been benefited, the other half have been partially relieved or have experienced no relief.

DR. OSCAR T. SCAMAHORN (Pittsboro): I am in a rural community—in a small town. There are some six patients around there who have hay fever, and four of them have asthma. I had read a good deal about sensitization and the tests and decided that this was caused by ragweed pollen in our country, so I proceeded to use the stock vaccine made by Mulford & Co. One man who had had asthma for twenty-five years did not have any attack at all. One of the other patients had one attack, but all were very comfortable following this treatment. In my experience with these patients the lateness of the appearance of the asthma is not caused by the hay fever, but is due to the climate. It is my experience that a wind from the southwest with humidity will produce asthma in these patients with hay fever. As long as the weather is dry they do not have the asthma.

I am going to test the other three cases out, or have Dr. Wynn test them out, within the next year. I began the treatment in June with these three cases and they reacted very beautifully.

DR. B. M. EDLAVITCH (Fort Wayne): It should be emphasized more vigorously than has been brought out by Dr. Wynn that the process of desensitizing an individual against a specific antigen is a rather delicate one, and is fraught with the greatest possible danger. The danger is so great that it may lead to a sudden fatal outcome, not only in the hands of the non-expert but in the hands of the expert himself. For this reason this very important procedure should not be taken up unless one knows just what he is doing and how to go about it.

DR. DAVID L. KAHN (Indianapolis): I have made this observation as a novice, that there is a percentage of persons who are sensitive to food proteins. They are not welcomed by the doctors who are treating hay fever patients but they are very thankful for any relief. Nine out of ten of these patients will not observe instructions that are given them in the way of diet. They will carry out instructions in a sort of haphazard way but they do not appreciate the need of absolute thoroughness. They will abstain from certain things and think that they are all right but they do not carry out directions thoroughly enough to secure permanent relief. These patients form a very considerable number of those who seek relief and if there is a treatment for them it is only an educational treatment. I should like to have Dr. Wynn tell us what he thinks on this subject.

DR. JAMES A. WYNN (closing): The historic items brought up by Dr. Beall are very interesting, as is all the history of the work back in 1819 and fifty years later when Blackley made fairly accurate observations about epidermal and pollen protein sensitization.

I think the fact mentioned by Dr. Edlavitch is very important and should be emphasized, that occasionally after treatment one meets with very alarming symptoms in these patients. A word should be said about these reactions for the men who are using stock preparations. The untoward symptoms usually occur within a very few minutes of the injection. Those that occur later are not likely to be dangerous. A slight cough or change in color is usually the first alarming symptom. Then follow severe asthma and urticaria. Anyone treating these patients should be on the lookout for these symptoms immediately after the injection. The first thing to do in the way of treatment is to apply a tourniquet just above the point of injection and then give one c.c. of adrenalin intramuscularly. This may be repeated in a few minutes if necessary. As Dr. Edlavitch has said, such accidents may occur even in the hands of experts. Such a case was reported last year from a well equipped clinic.

In regard to Dr. Kahn's question about food cases, I cannot speak with authority. Dr. Walker thinks in most food cases any desensitization is impracticable. Egg-white desensitization has been carried out and in some cases milk desensitization. I think there is a great field ahead in this line and believe that within the next few years many of our ideas will undergo complete revolution. A little later we may be giving antigens by mouth or in some other way.

A SAFE METHOD FOR DRAINAGE OF INTRA-ABDOMINAL ABSCESES*

JOSEPH RILUS EASTMAN
INDIANAPOLIS

As far back as the nineties, that is in the early days of appendicitis surgery, it was the custom of the writer's father to deal with certain cases of deep seated abscesses resulting from perforation of the appendix by dividing the skin and flank muscles down to but not through the peritoneum, then separating the peritoneum from the abdominal musculature by gloved finger dissection. He found that in this manner it was often possible to pass the finger tip quite extra-peritoneally as far as was necessary to puncture a retrocecal abscess, thus establishing a deeply intra-abdominal but extra-peritoneal drainage canal into the abscess. He spoke of this as burrowing down between the weather boards and the plaster.

I believe that practical application of this lesson can be made now and then at this time even with our present greatly improved knowledge of appendicitis. Much that was true thirty years ago is still true. Given a well defined retrocecal

(*) Read before the Section on Surgery of the Indiana State Medical Association at the Muncie session, September, 1922.

abscess as large as a hen's egg or larger, say what you will, a certain mortality will follow attempt to remove the appendix and wipe out the pus through a ventral peritoneal incision. On the other hand there should be practically no mortality following the opening of the abscess through an extra-peritoneal avenue of approach. It is not, however, the object of this paper to discuss any method of opening intra-abdominal abscesses at the time of operation; the foregoing reference has been made because the measure already described leads to another and more important step.

Some twelve or fifteen years ago in attempting to reach a retrocecal abscess as described above it was found easily possible to peel off the peritoneum down to a position alongside the cecum but the exploring finger found no ulcerated area through which a puncture might be made without danger of admitting hot virulent pus into the free peritoneal cavity. Therefore, the space alongside the cecum was loosely packed with two strands of gauze between which a large rubber drainage tube was passed, the ends of the gauze and the drainage tube extruding at the wound in the flank. About eight hours after the operation the abscess broke spontaneously and a large amount of pus was discharged from the wound. The gauze was removed gradually and the tube was taken out after ten days. There was no subsequent signs or symptoms of abscess nor has there been any recurrence of appendicitis symptoms nor any intra-abdominal trouble of any kind in the years which have lapsed since the operation.

The author has often dealt with abscesses consequent upon appendicitis in this manner and has been surprised to note how completely this plan of utilizing suction and chemotaxis has removed every vestige of infection in and about the appendix and to observe how free patients thus operated upon have remained in-so-far as any post-operative complications are concerned.

Much less frequently it has been found after opening the abdomen and peritoneal cavity in the usual manner, that large appendiceal abscesses deeply situated could not be opened and drained safely in the ordinary transabdominal manner, that is without extensive contamination of the general peritoneum. Therefore, in such cases a very large cigarette drain with a protruding tuft of gauze was placed upon the abscess, the abdominal wound being closed around the distal end of the tube. It has been the almost invariable rule that rupture of the abscess has occurred within forty-eight hours, but not of course until the canal established about the tube was sealed off by peritoneal adhesions. Thus a transabdominal but to all purposes extra-peritoneal avenue of drainage was constructed. It seems clear enough that adhesions and exudate about the inner end of the tube softens as the

result of the dynamic effect of pressure, suction and chemotaxis focalizing the infection about the inner end of the tube. "*Ubi stimulus ibi fluxus.*"

In cases of acute appendicitis with a definite resisting mass in the right groin, prudence directs that the flank incision be made cautiously until the peritoneum is reached. If an abscess is opened before reaching the peritoneum it will be, of course, very easy to provide ample and safe drainage. If, however, the peritoneum is found to be intact and movable over the underlying mass, the plan of peeling the peritoneum loose from the muscular abdominal wall and seeking a low point of puncture has much to recommend it. In such cases after reaching the peritoneum a thorough exploration with the gloved finger should be made to determine whether a true abscess exists or whether the mass consists merely of the enlarged appendix, clumps of omentum and exudate. If no well defined fluctuating abscess is palpable through the intact peritoneum the abdominal cavity should of course be entered and the appendix removed. If, however, an abscess is felt under the intact peritoneum there is excellent reason for avoiding the entrance into the free peritoneal cavity. In such an instance the abscess can be punctured low with the gloved finger and drained through the space between the peritoneum and musculature. This offers an avenue of ample and safe drainage. If, however, the low puncture cannot be made without considerable risk of contamination of the general peritoneal cavity, then the tampon of gauze and the drainage tube introduced deeply alongside or under the abscess will induce spontaneous rupture with safe drainage in practically every case. Experience has shown, moreover, that in cases presenting difficulty in determining whether abscess really existed or not, ample seropurulent drainage has been attended by prompt disappearance of the mass and complete recovery of the patient. Therefore in view of the relief afforded by the suction drain in such cases of doubt, the wisdom of opening up such a large mass and searching for the appendix in late acute or sub-acute cases may be doubted. This, however, does imply that the appendix should not be removed in practically every case seen early enough.

It has transpired in at least one surgeon's experience that the abdomen has been opened for the removal of pus tubes or confluent salpingo-oophoritis whereas the principal seat of pus proved to be external to the peritoneum. That is the intra-abdominal extra-peritoneal pelvic abscess was situated so high up in the pelvis as not to admit of easy diagnosis by bi-manual examination. Such an abscess may occur unassociated with marked infection of the tube and

ovary. An abscess so situated cannot always readily be reached through a vaginal puncture and the folly of opening such an abscess filled with hot pus at the time of the abdominal operation is or should be generally appreciated. The employment of the large cigarette drain with the gauze tampon at the inner end will militate strongly on the side of safety for if the large rubber tube filled with gauze is placed against the intra-abdominal side of the peritoneum covering the abscess the outer end of the tube projecting from the ventral wound, a deep well made up of protecting adhesions will quickly form about the tube and as a rule within a day or two the abscess will rupture spontaneously and discharge through the walled off canal without contamination of the general peritoneum. It should be admitted here that if the tubes and ovaries are definitely infected and are not removed at the time of the exploration because of the danger of rupture of the abscess, it may occasionally be necessary after the abscess has cleared up to re-open the abdominal wound for the removal of the infected adnexae. Certainly this is not brilliant surgery, but brilliance in surgery may be said to belong to another day and most good surgeons abominate the word brilliance as applied to their work.

The procedure described may be said to make for a tedious convalescence. That is true and a tedious convalescence is a dull affair. It is much less brilliant than a funeral but more satisfactory to the patient and surgeon. There are no doubt some who will look upon the proposal given as one of atrocious demerit but among these there will hardly be any who have had extensive experience with the plan. Not infrequently it represents a life-saving resource.

A few times in the writer's experience when attempts have been made to reach a pelvic abscess through a vaginal puncture, it has appeared that further dissection about the uterus might result in perforation of the pelvic peritoneum and in such instances the tampon tube has been passed into the pelvic cellular-tissue through the wound in the vaginal vault with the view of awaiting spontaneous rupture as the result of the dynamic effect of pressure, suction and chemotaxis. The rupture has almost invariably occurred after a few hours with ample drainage and eventual complete cure except in cases of pelvic abscess associated with pyosalpinx or other associated pathology, in such instances it being necessary later to remove the infected uterine adnexae through the abdomen. Perhaps many surgeons have made use of the procedure here described. They are presented for the reason that they are not generally employed in the relatively small percentage of cases suitable for their application. The plan has been used by the writer for about fifteen years but he had not known of its use by others until

Dr. A. J. Ochsner at the Toronto meeting of the American Surgical Association in 1921, reported the following case. Dr. Ochsner's report is given verbatim. It concerned a case of abscess of the pancreas.

A woman, aged forty-eight years, with symptoms of ulcer of the greater curvature of the stomach, with later proved to be malignant, was subjected to an exploratory laparotomy which demonstrated an indurated mass 5 cm. in diameter in the posterior wall of the stomach attached to the tail of the pancreas, which was swollen to the size of an orange, about 10 cm. in diameter. This swelling was congested and contained fluid. Evidently an abscess had formed in the tail of the pancreas from an infection originating in the perforated gastric ulcer.

In order to determine the condition more perfectly, an opening was torn in the transverse mesocolon and the abscess was found strongly adherent to the posterior wall of the stomach while the posterior wall of the pancreas was quite free. Great care was exercised in the manipulation of the pancreas not to rupture the abscess. An incision was then made in the left flank, immediately below the last rib, 5 cm. long, and a pair of forceps passed forward, guided by one hand, in the abdominal cavity to a point behind the pancreas. The blades of the forceps were spread widely open in order to establish a broad passage. The space behind the pancreas was then loosely packed with gauze, in the middle of which was placed a large rubber drainage tube. The gauze and the drainage tube were passed out of the wound in the flank and two cigarette drains were added and carefully placed behind the pancreas. The tear in the mesocolon was then repaired and the abdominal wound was closed. Five days after the operation the abscess broke spontaneously and a large amount of thick pus escaped. The gauze and the cigarette drains were removed gradually. The rubber tube was left in place for two weeks, when the discharge had been greatly reduced. The tube was then removed and the wound healed in two more weeks.

In case the abscess had not opened spontaneously it could have been opened safely after adhesions had been formed around the gauze tampon by passing long dressing forceps through the large drainage tube into the abscess, when the tube could have been pushed forward into the cavity of the abscess. The method is so simple and safe that it seems worth bearing in mind.

DISCUSSION

DR. MILES F. PORTER, SR. (Fort Wayne): I have had no experience whatever with this method described by Doctor Eastman. I can fancy that there might be cases in which it could

be used with advantage. The only objection that occurs to me is this—we have learned to regard the peritoneum as a much better antagonist to sepsis than the cellular tissue itself, and for that reason I am inclined to have more faith in its ability to take care of infection than I have in the cellular tissue. Some of the most unfortunate cases we have of abscess of the abdomen and pelvic cavities from whatever cause, are cases in which the trouble is largely located, not within the peritoneal cavity at all, but the tissues are killed from general sepsis, septicemia—the septic process having gone on apparently in the cellular tissue where there seems to be comparatively little resistance. However, while I have had no experience with this method, I do want to emphasize what Doctor Eastman said regarding the advisability of removing the appendix in all cases. Some of you perhaps will remember when the dictum went forth from a number of our friends that in all cases where the abdomen was opened for appendiceal trouble it should never be closed without the removal of the appendix. As a matter of fact, this is, in my judgment, very bad surgery sometimes. Usually, as Doctor Eastman has said, we remove the offending organ; but sometimes—not infrequently in years gone by, less frequently now because we see these cases early—but not infrequently in times gone by it has been true that the search for and the removal of the appendix has resulted in a funeral, when less brilliant surgery, or surgery guided by better judgment, might have led to the recovery of the patient.

As to the return of these patients for subsequent operation, not one individual in one hundred will ever have occasion for a secondary operation if he has had a frank appendiceal abscess opened and thoroughly drained. I have re-opened two or three of these cases, not because of a recurrence of the appendicitis, but to cure the hernia caused by the drain. So I feel recurrence is not so frequent as most people believe.

I fancy there are cases in which I should be very glad to use the Doctor's suggestion as to the use of a drain juxtaposed against the abscess cavity and wait for it to open.

DR. W. U. KENNEDY (New Castle): I am not able to see the practicability of such a procedure, because in case of free pus in the abdominal cavity manifestly such a procedure would not localize it, and I do not think there is a reason for believing that the simple presence of an externally placed tube could induce a flow of pus thereto. In a large localized abscess such as Doctor Eastman refers to there would necessarily be adherence as well to the peritoneum. If there be such, what is the advantage of carrying the tube just to it. Why not run the tube

directly in by the closest method of approach? If the tube were placed in the manner mentioned, I cannot understand by what means the abscess would be expected to open, unless by pressure—and what might happen in the meantime?

The theory of chemotaxis in this instance is certainly novel and I doubt its validity. How can a tube outside of an infectious process produce chemotaxis, and would it be positive or negative?

DR. J. R. EASTMAN (Closing): Doctor Kennedy misunderstood me. Of course in a case of general suppurative peritonitis with pus scattered through the abdomen no intelligent man would apply a method like the one described.

As to the question, how it happens that the abscess breaks at the end of the tube, I will admit I cannot explain that precisely, but we must bear in mind that Nature is trying her best to evacuate this pus. If we make pressure against an abscess we will help to induce ulceration, there will be a flow of cells to the point of stimulation, and the dynamic effect of the pressure will be in the direction of establishing ulceration of that abscess wall.

I have done this operation now many times and it seems practical and safe.

THE TREATMENT OF PULMONARY TUBERCULOSIS*

ALFRED HENRY
INDIANAPOLIS

My purpose in presenting this paper before this Society is to have an opportunity to emphasize two of the essentials in the treatment of pulmonary tuberculosis.

Treatment follows diagnosis and should, of course, be in accord. Whether disease be open or closed, active or inactive, very chronic or more acute, extensive or involving a small amount of tissue, depends partly the treatment to be advised. The more acute type should be looked upon as the emergency type. The cure for this type is what I choose to call the "Program Cure." It is needless for me to say there is no specific cure for this disease. If not, then we must look to the things which cure. We know there is a non-specific cure, because many patients get well, and many more should.

The cure for pulmonary tuberculosis is a combination of agencies, namely: *Rest, fresh air, nutritious food, proper mental attitude and proper medical attention.*

The burden of restoration lies with rest in a cure program of today. Formerly it lay with medical attention. It might be mentioned that formerly fewer patients were restored. That is why medical attention took a back seat while rest

(*) Presented before the Indiana State Medical Association at the Muncie Session, September, 1922.

occupies its place. In this brief paper I shall speak of only two of the five phases constituting the so-called cure: Rest and proper mental attitude.

Rest remains the sovereign remedy for tuberculosis.—KRAUSE.

Of all remedies proposed for tuberculosis only *rest* has stood the test of time.—WEBB. To be sure, it is a slow process and the patient tires of the effort. This is unfortunate, but all research to date fails to give us a worthy substitute. Science gives us quinine for malaria, mercury for lues, Flexner's serum for cerebrospinal meningitis, and antitoxin, a specific cure for diphtheria, but has not reached any such goal in the tuberculosis problem. No drug has been found to destroy the bacillus of Koch or the resultant harmful substances produced thereby. The medical profession is fortunate, however, in discovering a way out of the difficulty—although the route is rather long and tedious—while science is still working to find a short cut.

Rest is looked upon as a basis for healing throughout medical practice. It is observed in gastritis and enteritis by lessening the work of these organs in time of trouble. It is observed in appendicitis when no physic is prescribed. It is the basic principle when immobilization is thought of in relation to pleurisy, a fractured bone, and hip joint disease. Phlebitis, arteritis, neuritis and various "itises" of the eye are other conditions in which rest plays a prominent part. I will make the statement that rest performs a greater function in the treatment of pulmonary tuberculosis than in any of the foregoing conditions.

Suppose a patient presents himself with an apical lesion with symptoms pronounced sufficiently to enable one to make an unquestionable diagnosis. Suppose the disease is far enough advanced to show positive sputum, which proof too many of our profession must have in order to say "yes." This is an emergency case and is curable. The very first step in treatment is bed rest twenty-four hours each day. Moving air, regardless of the season, should accompany the rest.

I believe the best psychology is to institute no so-called medical treatment whatever for at least three weeks. Most symptoms will have subsided or partially so, and the patient convinced he is on the road to recovery. There is no argument that equals it. No argument is needed. As the symptoms become less pronounced, especially the temperature, which is the tangible thing a patient can best appreciate, an hour sitting up may be allowed and the patient told he has reached that point in his cure process. The good news is welcomed as nothing else has been since the

initial going to bed. The mental effect is wonderful. As the weeks go by an occasional hour is added as well as short walks of definite time or distance. Graduated exercise is as necessary in the convalescent as absolute rest is in the active stage. If one recovers on rest wholly, as he may do, and strikes out in his former usefulness, relapse is more likely to occur. Graduated exercise develops resistance to physical effort and prevents future breakdowns. Suppose three weeks do not show much if any improvement? Then use six or even ten weeks, as a basis for beginning treatment. With no improvement shown at the end of this period a grave prognosis might be made without hesitation. Be sure, however, all handicaps are removed in-so far as it is possible to remove them. A new program should be instituted with the satisfaction that the best one known had already been used.

Today we do not give up by saying, "This man cannot get well," but we must exhaust our resources. This is satisfactory to both ourselves and patients. Rest is brought about in different ways. Along with bed rest the unilateral case is placed upon the involved side as much as possible. This so-called posture treatment augments recovery by lessening the excursion of the sick lung. (Webb has contributed this practice.)

As the last resort we still have a rest phase to utilize in artificial pneumothorax. This method of treatment consists of putting clean air or nitrogen into the pleural sac gradually and persistently until the lung is collapsed, or as much as existing adhesions will permit. In this collapsed state the lung is forced to rest as well as allow nature to hasten fibrous or scar tissue.

No more hopeful ray of sunshine has ever come to the consumptive than the discovery of artificial pneumothorax. Of course, this treatment cannot be given to every advanced case. It is not carried out with much success when both lungs are involved, because when one lung is collapsed the other must do the work formerly carried on by both. If it be diseased the extra load may cause it also to break down. The rest idea has been violated. Too many adhesions from former attacks of pleurisy prevent lung collapse in some cases. Other conditions which contraindicate the use of lung collapse are pregnancy, tuberculous laryngitis and enteritis, nephritis, diabetes, and organic heart lesions. Without going into detail I could report several cases treated by this method over a period of six years who are now living and working and who had a grave prognosis passed upon them.

One very essential phase of treatment is to have the patient assume the proper mental attitude. A good way to begin is to tell the truth concerning the diagnosis. Let's do away with

sentiment and emotion and give a square deal on the basis of intellectuality. Up to within the last decade the term, "Dark Ages," might be applied to tuberculosis with as much meaning as it was in earlier centuries relative to general education.

When a physician is consulted it is usually the patient's desire to know what the diagnosis is. There seems to be no good reason for discriminating against any disease regardless of what it may be when the physician attempts to say what the disease is. It should be assumed the patient has intelligence and should have the service for which he asks and for which he pays, regardless of whether he has typhoid, tuberculosis or any other infection. "To make false or deceptive and obviously absurd diagnoses such as weak lungs and threatened lung trouble for the purpose of lulling the patient to a false sense of security" (Palmer) has cost many lives.

I address the patient somewhat as follows: "In going over your case, using all the necessary resources in order to reach a definite conclusion, I find you have tuberculosis. The one thing to do is to get well, which will require much patience on your part and considerable time. The cure is more simple than people know. Formerly it was thought that one must get on a train and go away to some other state where a cure was assured. In addition to extensive and expensive travel a large part of the cure lay in a drug store. It was also thought that long walks and vigorous exercises promoted a cure. Up-to-date methods have changed these misdirected notions and substituted new and more efficient means of curing this disease.

"The newest thing in the cure process is absolute rest. You will find by taking your temperature accurately it will gradually rise from below normal early in the forenoon to a fever stage sometime in the afternoon. While fever is only a symptom, yet we try to avoid it, knowing this will lessen its cause. In acute diseases we give drugs to reduce fever, but in tuberculosis we do not, because we have found a better and surer remedy. You know body exercise increases body heat and rest decreases body heat. This rule applies to well people and sick alike. You can readily see how the temperature problem is solved. Rest also lessens the cough which annoys you. Formerly people with your disease took cough medicine. Exercise in your condition will decrease your weight and strength. Rest will increase both.

"Another thing which will aid you in getting well, and which I shall only mention, is fresh, moving air. Such air contains twenty per cent oxygen and should be had twenty-four hours each day. Some people talk about it but do not get it.

"Tuberculosis nowadays is considered a sanatorium disease. I mean you should be in a place

where all rules and regulations looking toward a cure may be carried out. Sanatorium treatment is, or should be, ideal treatment. There you are kept continuously and definitely advised in regard to rest hours, ventilation, food, graduated exercise and many other things pertaining to your cure program. Of course, when I mention 'Sanatorium' you immediately think of a large building somewhere with the word 'Sanatorium' over the door. The sanatorium I have in mind may be anywhere. It may be your own home. It matters not whether it be a shack, a cottage, a two-story residence or a large building, to you it is a sanatorium. Regardless of its structure or locality it is your home while taking the cure. Your physician will be your superintendent and will tell you what to do and know your condition at all times. So you see you can have the benefit of sanatorium treatment in your own home or wherever you choose.

"I can remember when it was almost universally thought that anyone with tuberculosis must go West. Many still feel they must go one of the four directions. The fact is, this disease is cured by the cure process and not by any certain state or locality. The question should not be 'Where must I go?' but 'What must I do?' There is no objection to your going East, West, North, or South, just so long as you make up your mind to carry out the essentials of the cure.

"I am sure some do better at home, while others improve faster away from home. Both have advantages and disadvantages. Many who stay at home to take the cure are bothered by well-meaning but ignorant neighbors and relatives. They are advised to change doctors, and try certain patent medicines. Many well advised and contented patients are told to take long walks and exercise more or they can never recover. Too much company does not allow symptoms to subside and very often there is too much nagging by some member of the family who thinks one looking so well should be working. On the other hand going away often promotes homesickness and worry over expenses. The only answer to whether you should go away or remain at home is, 'Where will you be best satisfied and happiest?'

"Now I have told you something of the cure problem and which I regard the most essential part of getting well. You must remember your trouble has come upon you slowly and will require time to get well. This means you have a fight to carry on and you must not be impatient. You have a will and you must exercise its power. I have seen many recover who followed such advice as I have just given you. It is up to you. Your physician will do all he can to help you."

If the foregoing remarks constituted the general character of talks given to patients beginning to take the cure for tuberculosis, I believe

it would be less difficult to get results. My slogan is, "Less treating and more handling."

DISCUSSION

DR. G. C. JOHNSON (Evansville): Those of you who have been studying this subject during the past fifteen or twenty years realize the changes that have occurred in methods of diagnosis and treatment. Much of this change has been due to the Anti-Tuberculosis Association that has been spreading knowledge among the laity, and indirectly the physicians have been influenced to do better work in the treatment of this disease. As you all know, twenty years ago the prognosis in these cases was bad. At present it is very hopeful, provided we make the diagnosis early.

A question that often comes to us is, "Why a specialist in tuberculosis?" Is there any excuse for specialists? Do they get better results, and if so, why? I believe they get better results for the following reasons: First, as a class they make a better diagnosis and make it early, with proper classification of their patients, because the treatment of necessity will depend to a large extent upon the type of case. Second, they have the courage to tell their patients the truth. They are not afraid to sit down and talk the matter over, because they know that unless the full cooperation of the patient is obtained no results can be expected.

Many mistakes are made, as Doctor Henry says, by building up false hopes with drugs, tuberculin and vaccines. I do not wish to be understood as decrying these things, for they are valuable in properly selected cases; but there is a question in my mind whether on the whole more harm than good is not being done by tuberculin in the hands of the general practitioner. Many cases do wonderfully well under it, but it is because the physician has been able to classify and select his cases.

Another way in which many of us fail in handling these cases is in the instructions we give the patients regarding their daily life. If you are to be successful with these patients you must give them minute instructions for every hour of the day. The patients who get well are those who are willing to cooperate and follow you to the minutest end.

In patients not in sanatoria, and in private work, I follow much the same plan as Doctor Henry does. It requires an hour or two to start them, and you are continually pounding home facts. He who does this becomes something of a preacher on public health; he is continually instructing his patients about the danger of contact with children, which is important. This is a contact disease, and not one in which the germs are flying around in the air, as many people think. The reason patients do better in an

institution than at home is because of close supervision.

On the question of pneumothorax I agree with Doctor Henry that there is no method that has come into vogue in the last twenty-five years that is as beneficial as pneumothorax. I believe we do not spread the knowledge of this method as much as we should.

DR. CHARLES R. BIRD (Greensburg): There have been as many changes in the treatment of tuberculosis as in anything else that I know of, so many that we could not name them.

Although tuberculosis is one of the oldest diseases of known bacterial origin, little or no progress has been made in the last twenty-five years in the way of a direct agent with which to combat this disease. Unlike diphtheria, epidemic spinal meningitis, typhoid and other diseases, we have as yet nothing with which to combat tuberculosis. Therefore we must rely upon the methods which have been outlined by Doctor Henry.

He has touched sufficiently I think upon tuberculin and its place in medicine. So eminent a man as Doctor Cabot has said that in probably two per cent of the cases some benefit is obtained from tuberculin, so small a percentage as to be almost negligible.

The most important thing is the cooperation of the patient, and we must make use of the various means of propaganda in informing the public; that is, the Anti-Tuberculosis Society, the Tuberculosis Clinic, and the State Board of Health, which maintains sections on tuberculosis. Upon the degree of education and extent of cooperation of the patient depend largely the successful outcome of these cases. The gist of the paper can be summed up in Doctor Henry's words: "In the treatment of tuberculosis we need a little more sense and a little less science."

DR. W. A. EVANS (Chicago): The Chicago tuberculosis death rate was cut from 185 to 170 by educational measures alone. Adding to educational measures, hospital and sanitarium care, dispensary and nursing service, and allied procedure, the rate was cut from 170 to 70. In the same period of time the typhoid rate was cut from 170 to 1. We must not let up until the tuberculosis rate has fallen from 70 to the present typhoid rate of 1.

In addition to doing all of the things called for in Doctor Henry's excellent program, I suggest a supervisory and advisory service for those who have arrested cases of tuberculosis. This service should be offered as a pay service at a monthly or yearly rate. Under this service the arrested case would be visited in the home and in the working place, say once a month. This visiting would be done by a nurse. Once or twice a year the person enjoying the service

would go to the doctor's office for physical examination and for counsel. A similar service could be organized for those not able to pay, but wherever possible the service should be paid for.

DR. JOHN N. HURTY (Indianapolis): My whole thought is along the line of prevention and not along that of cure, but do you really appreciate the great work you are doing in the line of prevention by accomplishing cure? I think possibly I realize this to a greater degree than you who are up against cure, for I have also been up against prevention.

I think Doctor Johnson made a good suggestion to you in regard to talking to patients and warning them against contact, particularly with the children who are probably in their homes. Help them there, for your duty certainly extends in a curative way in that work. A woman with tuberculosis comes to you for treatment—she is a mother. You must ask her if she knows how liable she is to transmit the disease to her children; tell her fully about the situation. I think this is your duty and would especially emphasize that truth.

It was stated in the Tuberculosis Association meeting in Cincinnati some years ago by Doctor John Landis (he viewing tuberculosis only from the standpoint of prevention) that the problem of tuberculosis cannot be solved by treating the victims of the causative insanitary life. I think this should be kept in mind. We are not solving the problem by hospitalization and our efforts to secure arrest of the malady. The thing to do is to attack the root of the matter. It is safe to say that probably 80 per cent of all tuberculosis originates in childhood. All the more reason that we should look back to the child, and patients must be told that the children must be protected.

The Tuberculosis Division of the Indiana State Board of Health has such a small appropriation that it has been a question of what could and should be done with the dwarf appropriation. We have directed it almost entirely to one point—that as 80 per cent of cases originate in childhood, therefore protect the child. We teach ventilation of schools and homes, we teach nutrition of school children, and all methods which forestall the infection and development of this disease.

DR. T. F. BOWLES (Muncie): There is one remedial agent that has not been mentioned in the treatment of pulmonary tuberculosis which in my judgment surpasses all other drug treatment. In a practice of sixty-three years I have seen an enormous number of cases of pulmonary tuberculosis and have investigated and studied the masters of both hemispheres. I got my ideas of treatment from Doctor Mays of Philadelphia,

who made the suggestion that the tubercle bacillus could not live in iodine and that it could not live in creosote. He suggested the use of the respirator, compelling the patient to wear it each day, with a sponge soaked in creosote and iodine. I have treated hundreds of patients in this way, and while some of them have died, many have recovered and are now leading active lives.

DR. CHARLES P. EMERSON (Indianapolis): Those of us who are not specialists in tuberculosis must ask those who are, Doctor Henry especially, whether or not he believes in clearing out infected tonsils before organizing a rest cure for his patients. I mean tonsils which are really infected. Since so many tuberculous patients do well for a while and then as the result of an acute cold or attack of tonsillitis have a recrudescence of their tuberculosis, is it not wise to remove that focus of infection before putting them to bed, no matter whether they are running a fever or not?

There is surely no advantage in using oxygen or nitrogen to produce a pneumothorax. If you put air or pure nitrogen or pure oxygen into the chest, except in those cases with effusion, in a few hours the mixture is capillary gas. Why it is that so many use more expensive gas when air will do as well, we have never been able to learn.

Since the question of drugs has been introduced, I would mention that during the rest treatment good codliver oil is my "specific."

DR. THOMAS J. BEASLEY (Indianapolis): I wish to make two points. Doctor Johnson spoke of the effectiveness of the public propaganda in the interest of tuberculosis prevention. It is absolutely the duty of physicians to see that the people receive the full benefit of this propaganda. It is our duty in this respect to see that all patients are carefully examined and that a positive diagnosis is made. The time is past when we can take the temperature and pulse, tell them they are just run down and need a tonic, give them some medicine and advise a teaspoonful each three hours. It frequently requires a month or more to make a diagnosis in these cases, and if you have not time to make a thorough examination when the patient first consults you, do yourself and the patient the justice of setting aside a subsequent time for such an examination.

The other point I wish to make is in regard to the collapse of the lung and respiratory excursion. There are many cases in which it is impracticable to compress the lung by artificial pneumothorax. In these cases Leavitt and Swezey have inhibited the respiratory excursion by the application of adhesive bands four or five inches wide, which constrict the chest below the axilla. They have reported excellent results

in fifteen cases. In similar cases I have made use of a belt four or five inches wide, which is padded so that the pads fit over the floating ribs. I have the patients regulate this belt sufficiently tight to compress the lower portion of the chest. This has been found very helpful by reducing the violence and frequency of the cough, thus obtaining partial rest of the lungs.

DR. CHARLES S. BOND (Richmond): I wish to emphasize two or three things regarding the care of these patients.

We do not need to send these patients away. I think a home treatment is at hand, and if the doctor is astute in the management of his cases he will get better results than were obtained in the patients we used to send West and South.

When we have our first talk we should make the plan comprehensive not only to the patient, but to the family and to the neighborhood. We should explain that these patients are not going to get well in three months, or in five months. It will probably take a year and a half at least, and if you start out by saying this the patient will be willing to cooperate. Most of the cases have existed since childhood, and it takes a long time to get over the disease, especially if you pass over a summer. Then you have to pass over the winter in bed, because these patients cannot be up and about without being subject to cold and increased trouble. If the patient is in bed in a cold, well ventilated room, I think we get better results in the winter time than we do in summer, as a rule.

In regard to treatment, I know this is an era of nihilism. Doctor Emerson therefore has jeopardized his reputation and standing by recommending codliver oil in these cases. We used to give codliver oil and get good results. I was a delegate from this country to the Tuberculosis Congress in London when Koch read his second paper on bovine tuberculosis, and have been interested ever since. Many men have advocated many treatments. Vaughn of Ann Arbor advocated the use of buclein and said he cured many patients. Doctor James Whittaker of Cincinnati recommended creosote for this disease with good results. Many of these drugs are good in some cases, but you cannot prescribe any formula which will do good to every patient.

For compression I think the common air is as good as any of the gases, and a good deal better than oxygen, because that is absorbed so rapidly in the chest. Nearly all of these cases when looked at through the x-ray show infection in other portions of the lung and the argument would not hold good because it would make the other side not compressed do so much more work. It makes no difference otherwise whether the trouble is single or double sided, so far as medical treatment is concerned.

One thing must be borne in mind, that the general plan of treatment must be carried out in all cases of tuberculosis, and even tuberculosis of the abdomen can be relieved if the treatment is carried out over a sufficiently long period.

I do not think it is necessary to send these patients to a sanitarium. After trying for thirty years almost every other means, home treatment has proven far more satisfactory to me and to the patient.

ARHYTHMIA

I. E. BRENNER, M. D.
WINCHESTER

Types: Complete auriculo-ventricular dissociation. *Cause:* Hypothyroidism. We consider this case of especial interest because of the extrinsic disease that caused the auriculo-ventricular dissociation. Dr. Bandler has given the profession some wonderful thoughts in regard to endocrine disturbances. One can not read his book without having an entirely new perspective of the endocrine problems.

Case: Miss G. Age, 35. Family history—father living, age 72. Mother living, fair health. Four brothers living. Two sisters living—all good health. Negative tuberculosis and cancer history. Past history—Usual diseases of childhood. Scarlet fever, age 6; typhoid fever, age 6. Chronic tonsilitis. Operations—Tonsils clipped 1900; appendectomy 1916; tonsilectomy 1920. Menstrual history—Began menstruation age of 12, always scanty but regular. Has been irregular for the last two years. Present history—During the winter of 1919 and 1920 patient had several colds and excessive sweating. This condition lasted for weeks, even continuing up into the spring of 1920. She noticed extreme weakness at times, coming on with the least exertion. Associated with this, the patient noticed that her heart thumped. In May 1920 tonsils were removed but patient felt no better.

We saw this patient for the first time May 23, 1920, about three weeks after tonsilectomy, in a state of extreme mental and physical collapse, with a marked arrhythmia and bradycardia. Radial pulse, 38 to 40 per minute. Blood pressure, Sys. 138, D-90. Upon exertion we found the pulse increased from 8 to 10 beats per minute. In this arrhythmia or irregularity of heart action, we found that the pause noted in the radial artery was coupled with complete absence of heart sounds—as noted by auscultation of the heart.

In arriving at a diagnosis by process of elimination we were confronted with one of two conditions, namely: (1) Extra systoles or premature contractions, or, (2) Complete auriculo-ventricular dissociation. In auriculo-ventricular dissociation the pause noted at the radial artery is coupled with complete absence of heart

sounds, since no ventricular contraction takes place; in extra-systole, on the other hand, the pause at the radial is coupled with one or two heart sounds due to the super added extra-systolic contraction of the ventricles. In the first instance there is present the ordinary rhythm merely slowed down in two phases, or rather, consisting of the two sounds, systolic and diastolic; in the second instance there is a three phase rhythm comprising the two normal systolic and diastolic sounds followed by the systolic sound of the extra-systole, or a four phase rhythm, if the extra-systole, having forced open the sigmoid valves, is accompanied by a second, diastolic sound.—Martinet.

The above being true, we were satisfied that we were dealing with an auriculo-ventricular dissociation, but the next problem confronting us was: Is the dissociation functional in type, or is it organic? It is a well known cardiologic fact that change of posture, exertion, deep or forced inspiration, and locomotion cause a distinct change in the rate of functional bradycardia; in organic bradycardia, on the other hand, they exert no appreciable effect. Upon mild exertion the pulse was increased from 8 to 10 beats, and under excitement it was raised to 55 and 60 beats per minute. This rather pointed to a functional bradycardia. However, we had conclusive evidence of a degenerative myocardium, with slight enlargement of the heart and a well marked systolic mitral murmur. Patient was confined to bed from May until August and during this time was given Tr. Digitalis for the myocardial condition. The heart symptoms somewhat improved and the patient gained strength. Patient not allowed to walk until in September. She continued to improve of the weakness so in January 1921 we sent her into the Southwest hoping that the change and warmer climate would be a benefit. She continued her improvement for a couple of weeks and then began a recurrence of the arrhythmia and a marked return of the bradycardia. Patient immediately returned home and we saw her on February 22, 1921, with marked arrhythmia and bradycardia. Pulse 34 to 36. Blood pressure Sys. 140, D-70. Patient very weak and nervous. Was put to bed and under the care of a nurse. Treatment: Tr. Digitalis M X every 4 hours. Strych. Sulph. Grs. $\frac{1}{40}$ every three hours. Each day the arrhythmia was more marked, bradycardia remaining about the same. Patient rapidly lost weight in spite of the fact that she was taking nourishing feedings. In four weeks patient had lost from 20 to 30 pounds.

Was called one day to see her, because the nurse thought she was dying. We found her in a semi-conscious state, pulseless at the wrist. On auscultation the heart was beating 18 to 20 to the minute. We gave atropin sulphate grs.

$\frac{1}{150}$ hypodermatically to paralyze the cardiac terminals of the vagus, and in a few seconds the pulse could be felt at the radial—rate 55 beats per minute in a very short interval. What was the cause of our functional dissociation? Patient showed definite clinical signs of hypothyroidism, namely, physical torpor, sluggishness, sensitiveness to cold, diminution of the sweat of secretions, skin dry and scaly, impaired nutrition of the skin and hairy covering, reduced urinary output, and a doughy condition of the tissues.

We had given the signs of hypothyroidism in this case very grave consideration for some time, but because of the serious condition of the heart, we rather hesitated to use any of the active principle of thyroid; however, after the almost fatal ending, we began giving thyroid extract grs. $\frac{1}{4}$ three times a day. At the end of the first week we noticed a slight improvement in the arrhythmia. The dose was then increased to thyroid extract grs. $\frac{1}{2}$ three times a day, and at the end of the second week there was marked improvement in the arrhythmia and a slight improvement in the heart rate. This same dosage was continued over a period of three months. The arrhythmia had disappeared while the pulse rate ranged from 68 to 72.

At this writing patient is free from any irregularity of the heart with a pulse rate of 68. Upon mild exertion (walking several city blocks), pulse rate increased to 74 to 76, but no evidence of arrhythmia. Normal metabolism has been established. Patient weighs 134 pounds.

THE IDEALS OF THE MEDICAL PROFESSION*

DR. CHAS. H. GOOD

President Indiana State Medical Association

HUNTINGTON

Mr. President and Members of the Huntington County Medical Society and Guests:

For this honor I thank you beyond words to express. I was grateful when selected by the Indiana State Medical Association for its President, but I am doubly grateful for this honor by the ones who know me best. It often has been said, "A prophet is not without honor save in his own country," and to be given this signal honor by my home friends affects me more than anything in my life. After all I cannot help but feel that it is not so much a personal triumph as it is that you are honoring the office and the great profession we represent, and I hope and trust that with your aid and with the aid of my friends over the State, when we meet at Terre Haute in 1923, you will have no reason to be disappointed.

I am very much pleased to know that the presidency of the State Association came to me

*Address at the complimentary banquet given in his honor by the Huntington County Medical Society.

through the loyalty of my friends, and I can assure you I seek no personal glory nor personal ambition, for I have reached that period of life when I am content with the happiness of home and family. But having been made president of the great medical organization in Indiana that stands for organized medicine, I want to see it grow to greater numbers and to maintain its high ideals, for no other profession stands for altruism and nobler ideals than the one to which we belong.

From the days of Hippocrates to this hour, the aim of the regular medical profession always has been higher and higher, with no thought of personal gain, but to help humanity. So I have fixed my mind on one thing more than anything else as a goal to be reached in furthering the aims and purposes of organized medicine—increased membership in 1923. Of course we do not mean alone quantity, but quality. Numbers alone do not make an organization great; but we all agree that “in union there is strength”; so, if we at least can bring our membership back to what it was before the war we will have done a great work. Then it was 3,300 and we had four delegates to the American Medical Association, now 2,552 and only three delegates.

The cause of the slump in our membership was the world war, and the decrease has continued—so I ask you all to get behind this slogan—“Let’s go, 3000 members in 1923,” and with each member standing behind the slogan and a united effort we can win.

The attendance of the Freshman year in the Indiana University is greater than any year for some time, showing that higher medical qualifications are not keeping the young men and women away from our ranks, and with normalcy in economic questions coming back, the profession still has its allurements and a great field for young men and women with high and noble ideals.

Some time ago an excellent paper on medical advertising was written by one of my good friends and published in our splendid State Medical Journal. On the whole I agree with him, for one of the important subjects of the house is, “Shall we advertise?” and thus put doctors in the same class with the quacks and pseudo-medical cults. He expressed himself vigorously and in such a way as to leave no doubt where he stood. His contention was that any kind of medical advertising is a violation of the code of ethics and should be condemned. From my own experience and observation I have come to the conclusion that whenever a physician resorts to personal advertising in any form it is his own fault and not the reporter or editor. In our own city, during the fourteen years that I have been a resident of Huntington,

personal advertising in the daily or weekly papers is almost unknown. So it is up to the medical men to put a stop to the objectionable practices and with the campaign being conducted by *THE JOURNAL*, the entire state should be free from it. While the article referred to was timely, the author makes one statement over which I am not so enthusiastic. He says, “There was a time when the medical profession was held in reverence and respect. Physicians were regarded as men of intelligence, education and honesty of purpose, a profession of deeds, not words. They were medical advisors and all were satisfied. But today—the more confusion we can create, the more attention we can attract to ourselves, the more we can succeed in keeping our names before the public legitimately or otherwise, the more we expect in return.”

That is a severe indictment of us today, and were it not possible to refresh your memory we might think it all true. I was born the son of a country doctor and have some facts that do not bear out the above. The old time family doctor was beloved by all his patients and was a power in his community, but that he was free from present troubles will bear investigation. We had no paper in our town, but for ten years my father and his preceptor did not speak, and I can recall when the doctors of Huntington carried on an acrimonious newspaper controversy every week for several weeks. One of the most notorious quacks of his day traveled all over the state advertising himself, and often was engaged in newspaper quarrels with local doctors. I remember when we formed our Huntington County Medical Society all was not plain sailing. I could go on and relate numerous instances when the profession did not measure up to its ideals. Of course, we are beset with the irregulars now as we were then, but the great body of our profession is standing on higher ground than ever before. I admit that it is somewhat discouraging when we see in every community one-half dozen chiropractors attempting to cure all diseases by “adjustments” of dislocated vertebrae or tendons, and cults letting their children go without medical aid, but such conditions have existed in the past.

We should continue to uphold our ideals. All who expect to engage in the practice of medicine and be licensed by the State to do so must have educational qualifications and know the fundamentals of medicine, then they can be licensed to practice medicine and use their choice of remedies. On that foundation we build our house and defend it to the limit. We must see that the men who go to the legislature are in favor of such a plan and will support it. We are not seeking to prevent any one from being a physician or surgeon, but to protect the people from quacks and incompetents.

and on such a platform we must win. In the meantime let our own profession stand as it always has stood for the right, and for high ideals. If we keep our profession clean the right will prevail. For as Garfield said on the death of Lincoln, "God reigns and the government at Washington still lives"—in legislation we seek no ulterior motive, no personal gain, but the good of all the people.

No other profession is quite so altruistic for we stand for the enforcement of laws and passing new ones that curtail and lessen our business. The prevention of disease comes first, and then the cure, certainly noble ideals. Whatever will cure and save human life belongs to our armamentarium and all we ask is that he who has the handling of so precious a thing as a human life shall know the fundamentals of medicine so that he will be able to diagnose diseases intelligently and then use the remedy science and experience has proved to be of value in relieving or curing the patient. This can only be accomplished by requiring every practitioner of medicine to be wholly subject to the same standard of educational qualifications and other requirements.

We stand behind our Public Health laws and insist on their enforcement, especially the laws covering quarantine and reporting of communicable diseases. Under this legislation and the use of antitoxin we have seen diphtheria's death rate reduced from 48 per cent to 4 per cent—typhoid fever no longer a gold mine for the doctors—tuberculosis cut in two—blindness from gonorrhea has been obliterated, and venereal diseases controlled, and our profession has been and will continue to be in the forefront in this great work. But we want no old world State Medicine fastened upon the profession or the people, and we trust that those of our profession who have been the leaders in the agitation will listen to the rumblings coming from the great mass of the profession and not attempt to tie us up with any such un-American ideas. Great clinics like the Mayos and specialists like Cushing, Cuttling and Bloodgood are all worthy and needful. Clinics in smaller cities, properly run and carried out along the same lines as followed by the individual physician and surgeon, are here to stay, and serve a useful purpose by aiding and helping cure the sick. But to me the greatest need of the hour is to encourage that greatest specialist of them all, the keystone of the arch of our profession, the family and country doctor. That the telephone, automobile and good roads have made great inroads on him is only too true. The increased urban population has drawn doctors to the cities where it takes more energy and ability to meet the requirements, but generally brings less remuneration and less experience. The young graduate

should be encouraged to locate in the smaller towns, and with modern transportation he will find it not so hard and not so much difference as one would think. The opportunities are wonderful. It was a country doctor, McDowell, who did the first ovariectomy and placed his name among the immortals, and Rochester, today the Mecca of surgery, a few years ago was only a small country town with the leading physicians of that time the world renowned surgeons of today, thus proving that great cities are not necessary to successful surgery.

In my mind surgery and medicine never stood as high as it does today. Those who have been to the old world since the war and in Paris saw the great Pantheon De Guerre, great painting of all the nations of the world war, stand in amazement at the wonderful scenes, but all agree that the ones by England and America more nearly represent the sentiment of the people than any of the others. Neither gives all the glory to the generals or diplomats, for the painters, like the people, are tired of war and long for peace. The most marked for England is the painting of that little English nurse who was shot by order of the German general in Belgium for being a spy, but whose death so stirred the whole world that her name and fame is first in the hearts of the English. For America, out in front of all the great leaders, is the picture of a physician and surgeon—Carrel—the man who gave to the world the modern treatment of wounds—dressed in the garb of the hospital physician. He is first and will ever be a monument to the great body of the medical profession who so eagerly enlisted in the world war. So if that be the estimate of the world's great painters, let us all strive to keep our profession clean and noble. Robert Louis Stevenson has said, "There are men who stand above the common minds—the soldier, the sailor, and the shepherd not infrequently, the artist rarely; the physician almost as a rule. He is the flower of our civilization and when that stage of man is done with, and only remembered to be marveled at in history, he will be thought to have shared as little as any in the defects of the period and most notably exhibited the virtue of the race. Generosity he has, such as is possible to those who practice an art, never to those who drive a trade; discretion, tested by a hundred secrets; tact, tried by a thousand embarrassments, and what are now important, Herculean cheerfulness and courage, so it is that he brings aid and cheer into sickrooms, and often enough though not as often as he wishes, brings healing."

So, in conclusion, I urge each one here to help carry out this program, and with your assistance, and continued good will, I know we cannot fail.

**THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION**

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

Office of Publication, 406 W. Berry St., Ft. Wayne, Ind.

JANUARY 15, 1923

EDITORIALS

FUNCTIONAL TESTS OF HEARING

Functional tests of the hearing seems to be a lost art or an art never possessed by the horde of half-baked ear, nose and throat specialists that infect many of our small as well as larger cities, if we can judge by the large number of deaf or partially deaf people who have gone from specialist to specialist without having had a thorough test of hearing by tuning forks and any of the other devices commonly used by qualified ear specialists. From the standpoint of the profession, it is unfortunate that we have so many men who pretend to treat ear diseases without having an adequate appreciation of the value of the test of the hearing function in order to differentiate the difference types of deafness. In fact, as one otologist (Grayson) well says, "No diagnosis of disease of either the conducting or perceptive portions of the ear can be complete without an intelligent application of the various acoustic tests and a clear comprehension of the results that they give. This very great importance arises from the fact that they not only inform us of the particular portion of the ear affected but that they enable us to closely follow the courses of the disease and help us to a timely diagnosis of disease and to the value or futility of the treatment employed."

Patients often declare that they have been treated over long periods of time without anything more than Politzerization as the form of treatment employed, sometimes accompanied by some form of electrical treatment, but without having been subjected to anything more than the most superficial tests of the hearing with a watch or whispers. Testing with a watch is a crude method for the reason that the sound is of poor quality and varies so in intensity and pitch. Even if the watch were used it would be necessary to use the same watch at all times in view of the fact that probably no two watches tick alike. Even the voice test is unsatisfactory because of variability. The whisper test gives more precise information, and yet it too is subject to variation even when produced by reserved air. The least variation is found in tuning forks, but they, too, should be standardized, free from

over-tones, and the number of vibrations per second of each duly recorded. The average specialist may not be willing to purchase the more complicated sets of tuning forks and various other expensive devices for testing the hearing function, nor will such elaborate outfits be absolutely necessary for the average run of cases, but there is no excuse for any man posing as an ear specialist who does not possess a set of tuning forks ranging from 32 to 4096 vibrations per second, and a good Galton whistle. There also is no excuse for a specialist who does not use these tuning forks intelligently in carrying out at least two well known tests, Rinne's and Weber's. If these tests are carried out carefully no glaring errors will be made in differentiating between a disease of the sound conducting apparatus and a disease of the sound perceiving apparatus. Furthermore, there will be no excuse for continued Politzerization of cases of nerve deafness, an altogether too common practice which is followed as a result of the ignorance or knavery of the physician, though we are inclined to believe that more often it is due to ignorance.

**THE CLINICAL VALUE OF THE
WASSERMANN REACTION**

The effort to standardize and improve upon the technic of making the Wassermann reaction certainly is justified if a valuable procedure is to retain its reputed position as an aid in diagnosis among careful clinicians. Accumulated experience indicates that the significance of the Wassermann test, in a large percentage of cases, depends entirely upon the interpretation of the test, the technic employed and the care with which the test has been made by the serologist. The unfortunate condition confronts us that there is no standard technic recognized by all of the better class of laboratories, and even the technic itself can and should be improved upon if the results are to be anything like uniform. So often we hear it said by the clinician that a strongly positive Wassermann merely corroborates clinical findings, but that without clinical findings a positive Wassermann is of questionable value. Such a view, held by many physicians, can only be changed through an improvement in the technic of the laboratory and the adoption of uniform methods in interpreting the results. Certainly a standardizing of the technic of the Wassermann reaction must come about if the Wassermann reaction is to be considered, as one well known writer says, "ninety-five per cent. reliable as a diagnostic measure." Bearing upon this point a paper by Broeman (*Amer. Jour. Syph.* July, 1922) gives the clinical experience of the Wassermann test in his series of 366 patients upon whom 1742 tests

were made. A discrepancy of some degree in 36 per cent. of the cases and variations of three plus or more in 25 per cent. of the cases emphasizes the importance of careful clinical examination, including history, in syphilitics. In the series of cases 14 per cent. were reported negative from one laboratory and positive (two or more plus) from another laboratory. In 16 per cent. of the cases not more than one plus was reported from a laboratory and four plus positive reported from the second laboratory. Out of 276 cases, 75 per cent. were reported identical on all tests, and of these 233 were negative. One-fifth of the negatives should have been positive according to their history and therapeutic tests. Fourteen per cent. of the cases showed definite infection though with negative Wassermann.

The author well says that the Wassermann test must not be strongly relied upon, as is shown by his series at one laboratory where 52 negative reports were returned from 52 patients with a positive history and positive therapeutic tests for syphilis. He further says, "A negative Wassermann in the presence of a suspicious sore of the penis does not exclude syphilis, nor does a positive Wassermann necessarily mean that the patient has syphilis. It is absolutely wrong to make the diagnosis of syphilis, or begin treatment, on the laboratory findings in the absence of clinical or historical evidence. If the diagnosis of syphilis is accepted the patient should be treated for two or three years, even if the blood is negative. The laboratory report is not and should not be the final word; the clinician's is, and ever should be, the final one, when dealing with human ills."

The fact that we at present have no standard technic for the Wassermann test is in a large measure accountable for the misunderstanding and confusion among the members of the medical profession regarding the exact value and limitations of the test, both in the diagnosis of syphilis and when used as a control of the treatment of the disease. While much of this misunderstanding rests upon the shoulders of laboratory workers, who many times delegate the Wassermann test to poorly trained or careless assistants, thus making it possible to secure erroneous and unsatisfactory results, yet the lack of a uniform and standardized technic on the part of competent and conscientious serologists tends to nullify some of the findings of the test. It is not out of place to urge upon the profession the necessity for submitting material for the test to well qualified serologists if reliable results are to be obtained.

VARIABILITY OF NEOARSPHENAMINE POTENCY

A report from the United States Public Health Service states that an investigation of the potency of various makes of neoarsphenamine now on the American market shows a considerable lack of uniformity in the parasitocidal value of the preparations. Heretofore we have been led to infer that these preparations have been made under a United States license which guaranteed uniformity of product, and under such conditions we fail to understand why there should be a discrepancy in potency. As stated by the report, the most important point brought out by the investigation is the fact that neoarsphenamine is a valuable product but that so far as parasitocidal power is concerned the physician using neoarsphenamine can never be sure of obtaining a product of constant potency unless he uses continuously one and the same lot. Very naturally, the report does not give the names of the manufacturers of the various products tested, as such publication probably would be construed as indicating bias or favoritism, and the manufacturers producing neoarsphenamine of greatest potency would use the report as advertising matter and an endorsement of their product. However, is it quite fair to the medical profession, and to the patient who is subjected to neoarsphenamine treatment, to withhold information that is so vital to the highest element of success in treatment? Neoarsphenamine is so generally employed by the medical profession that we have a right to know what the potency of the preparation is that we are using. Both the doctor and the patient are being shamefully imposed upon if a certain inferior preparation of neoarsphenamine, supposedly as potent as any other preparation of arsphenamine, is being used with the idea of obtaining as good a therapeutic result as can be obtained by such treatment. It may be that certain manufacturers are not maintaining the standard of potency attained in their product a few months or a few years ago, and if this is true then there should be some means of checking the products turned out by these manufacturers. At all events there should be some means adopted and enforced whereby we can be assured of the potency and the reliability of neoarsphenamine preparations. The stamp of approval which applied two years ago should not be considered as applying today unless it can be established that the product of today is up to the standard of two years ago.

THE INDIFFERENCE OF THE MEDICAL PROFESSION IN LEGAL MATTERS

Experience has taught us that when we really want to accomplish a task it is better to give it to a busy man; when we want it to be done more

rapidly and with accuracy we assign it to a *very* busy man. The medical profession has taken this so literally that when legal enactment is threatened they sit back supinely, trusting that their duly elected officials will do all that is necessary to protect them, and just as thoroughly determined that they will do nothing to protect themselves—a most instructive example of “expectant treatment.”

Is it not about time that we awake to the needs of self-defense? Each time the houses at Albany adjourn without actually declaring the practice of medicine to be a felony, the profession takes a long breath, and with a feeling similar to Micawber, on the first of the year, when he renewed his I. O. U.'s, they “thank God that’s over.”

The chiropractors think enough of legalizing their chicanery to pledge large sums for the furtherance of their interests—they pay the legal profession well to defend them—they appear both in person and by testimonial—they weep great salt tears on the shoulders of our lawmakers, while at the same time they are stealing the lawmakers’ birthright, viz., safeguarding the public from quack and charlatan.

Let the medical profession start its own public propaganda. Tell the people the truth. We plead only for a just and proper legal restraint and a regents’ control which is applicable to all professions in the State. We think there is a difference between six *years* in the study and preparation for a medical career and six *weeks* in the preparation of a chiropractic. We don’t believe that a chauffeur, who could not write his name, is qualified to be a full-fledged chiropractor or anything else in the above time. We may be prejudiced, but we state it as an honest conviction. On the other hand, ought we to blame the embryo chiropractor? It is a shortcut to a gullible public. The Palmer School, which dominates the advertising, pleads his cause for him and does it well. He has only to raise funds to pay for the course, save sufficient to purchase a sign and table, and there you are—perfectly simple, simply perfect.

It is unfortunate that the medical profession does not take on self-insurance—pay dues to the State Society sufficient to maintain the proper machinery for its own protection. We pay two or three hundred dollars yearly as dues in a golf club—health insurance. Think of it—three hundred dollars for health and amusement, and the Medical Society of the State of New York gets five dollars each from its 9,500 members to carry on the work of survival, not to mention the 5,500 other physicians in the State who do not care enough about medical matters to even belong to the State organization.

We never will be able to do the medical business of the State on a five dollars per capita basis. Let the need of a greater revenue be agitated and published, and we believe that with better organization and a wider knowledge of facts and the good accomplished, both profession and laity will realize their mutual obligations.—*The New York State Medical Journal.*

MEDICAL LEGISLATION PROPOSED

No one doubts that new legislation is required covering the right to practice medicine in Indiana in order that the health and best interests of the people will be safeguarded. At the present time Indiana is the dumping ground for quacks and charlatans of every type, and every pseudo-medical cult is represented by its followers who practice medicine without let or hindrance. The mere fact that some of these cults are claiming new theories concerning the cause of disease, and are advocating new methods of treatment that are peculiar to their beliefs and practices does not alter the cardinal principle involved which, in essence, is that anyone who pretends to treat or relieve the sick should have sufficient education concerning the condition of the body in health and disease in order to diagnose and prescribe intelligently. This means something more than a common school education plus a few weeks or even a few months of indifferent training and experience in a so-called school that is founded upon an inconsistent and irrational theory as to the mechanism of the human body and the nature and cause of its abnormalities. There is a certain amount of fundamental knowledge concerning the human economy that is recognized as established facts, proven beyond any doubt, which knowledge must be possessed in passing an opinion upon health and disease. The plea for educational requirements and a standard of fitness for the practice of medicine is not in the interests of any one school or any cult, but it is in the interests of the people who should know that those they employ to look after their health are competent to do so, as evidenced by their education and the training required of them in order to perform the work intelligently. The representatives of the regular medical profession are going to make an effort to have the Indiana legislature now in session so amend the present medical law that it will afford protection to the people and establish a standard that will be absolutely fair to everyone who desires to practice the healing art. In conformity with this intention, the chairman of the legislative committee has enunciated certain principles which are to be fought for and which are as follows:

1. That no *Special* privileges be given to any person, class, or cult, who pretends to recognize and treat human disease.

2. That all who pretend to recognize and treat human disease, stand equal before the law.

3. That one fundamental educational standard be required of all who pretend to recognize and treat human disease, and that all should submit to the same license requirements.

4. That *One Board* pass on the fundamental and professional qualifications of all persons seeking a license to permit them to offer their services to the public as one skilled in the recognition and treatment of human disease.

5. That the present law be so amended that it will prohibit any person engaging in medical practice, healing art, or any other practice, under any name, whatsoever, which has for its purpose the recognition and treatment of human disease, until these principles have been complied with.

6. That nothing shall be written into the law which could in any way be construed as interfering with any method of treatment which any person who has complied with these principles might wish to employ.

We especially urge every member of the Indiana State Medical Association to give our legislative committee, of which Dr. Frank Cregor, 725 Hume-Mansur Building, Indianapolis, is the chairman, whole-hearted support in the effort to bring about the action desired. As Dr. Cregor has well said, "there is no influence with a member of the legislature which equals home influence, and there is no influence anywhere which is more potential than that of the medical profession if organized and brought into force."

The regular medical profession never has stood and never will stand for selfish interests, but it should make an endeavor to have written into the law every principle enunciated.

COUEISM

Again we are confronted with a new theory for the cure of disease, and this time it is the repetition of the statement, accompanied by a belief in it, that "Day by day in every way I am getting better and better."

The originator of this wonderful scheme for relief has arrived in this country and, as usual with most chaps who profit by a fantastical theory, his coming has been heralded far and wide by the public press, and it is safe to presume that he will profit immensely by his writings, lectures and consultations. He wouldn't be expounding his theories and he wouldn't be here if it wasn't for the money to be derived. Of

course, we are reminded of Ashur's predicament when he repeated Coue's formula too long and changed his bow legs to knock knees, and in depicting which cartoonist struck a chord that rather emphatically points out the absurdity of the whole thing, but, as has well been said, "A sucker is born every minute," so Coue will find a host of followers among those who are ever looking for something new. It is said that the Christian Scientists are looking askance at Coue and trying to bolster up their waning strength by declaring that Coue's theories have nothing in common with the Christian Science delusions, but to a rank outsider it is hard to differentiate, and we suspect that the Christian Scientists will lose out, much as the osteopaths lost out when the chiropractors came into existence. In speaking of chiropractors, the celebrated Lorenz perhaps feels highly flattered to have the chiropractors claim him as one of their own.

When we note the tendency of the people to doubt incontrovertible facts, and to wander off like Ponce de Leon in a vain search for the Fountain of Youth, or something that will cure disease by magic, we feel like paraphrasing Coue's statement by saying, "Day by day in every way we are getting to be bigger d—fools." In reality Coue's vagaries and the irrational and inconsistent theories of the Christian Scientists are dangerous when applied as generally to the relief of physical ailments as recommended by their advocates, but that is another story.

THE SLAUGHTER OF THE INNOCENTS!

Two more children have been offered up as sacrifices to the theological views of undoubtedly sincere but certainly misguided parents. It is none of the public's business! One of the parents says it isn't! In Cincinnati a fifteen-year-old high school girl was taken sick on October 24. Her mother had faith in divine healing and therefore did not call a physician. Nine days later events had shaken her faith enough to make her willing that a physician be called, but not enough to make her willing that the physician should administer antitoxin. The girl died the next day. In Spokane, Wash., under "Christian science treatment," John Earl Halverson, 6 years and 11 months old, died, November 19, from diphtheria after a week's illness. The father stated to the press his views as follows: "We are Christian scientists and do not believe in doctors or antitoxins, so no doctor was called. I see no reason for making any fuss over this case any more than over any other death. The public is not interested in what the child died of, and I wish you would not make mention of the case."—*Jour. A. M. A.*, Dec. 9, 1922.

A MEDICAL JOURNAL FOR LAY READERS

The Board of Trustees of the American Medical Association announces the early appearance of a medical magazine for lay readers, published and controlled by the American Medical Association. It is to be called "*Hygeia*," and while we think that a better title could have been selected for a magazine intended for lay readers, yet we welcome any health magazine which is to be controlled by and carry the authoritative influence of the great American Medical Association. This new periodical will be devoted to sickness, prevention in all of its phases, and the best writers, both scientific and popular, will contribute to its pages. We hope that the venture will prove a success and we bespeak for it the patronage of the members of the medical profession. It should be in every public, school, and church library, yea, even in the libraries of the Christian Scientists who may find in it food for calm reflection which they preach. It should be in the hands of every public school teacher and every minister of the gospel, for their influence is to be reckoned with, and be it known that many of them are proselyting for various fads and isms connected with the practice of medicine. A copy of the new Journal should be found on the table of the waiting room of every regular doctor, and encouragement of the enterprise will be appreciated by the American Medical Association if a large proportion of the Fellows of the Association take advantage of the special offer to them of a one dollar subscription price.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

THANK God the American Nation is saved! Coue has arrived and an expectant populace bows down to the new savior of mankind. Coue says that it is his fondest hope that his theories and practices will be adopted by medical schools. So goes the press reports.

It is announced that a course of instruction in art as applied to medicine is now open to students in all four years at Johns Hopkins University. What a pity that we can not have in all of our medical colleges a course in professional ethics and professional conduct as applied to the practice of medicine. Such a course might not be popular, but it is needed very much by the average medical student in order to start him out right in his ideas of what constitutes a true physician.

YOUR county medical society secretary is waiting patiently for the receipt of your medical society dues. Don't put him to the trouble of pestering you repeatedly for a payment that should have been made before this. Remember that his job is a thankless one, and the fulfillment of your obligations is of more importance to you than to him, though common decency requires that you respect his position and thus save him time and labor. If you haven't paid your dues, do it now!

ARTHUR BRISBANE, the well-known and popular writer of articles on "Today" which appear in many daily papers, makes some rather pertinent and rational comments upon various subjects, an example of which is the following:

"Mr. Coue has come from France, a happy, sincere little person who once invested \$20 in a correspondence school course in hypnotism, and has done extremely well since.

"He will have his day and be forgotten, like Mesmer and the others. And the world will come back to the cold, hard fact that the only way to get 'better and better in every way' is by working harder and harder, living more and more wisely."

COLORADO, especially the city of Denver, is fighting an epidemic of smallpox. It also has been fighting vaccination, and perhaps 190 deaths out of 602 cases of smallpox may serve to open the eyes of the inhabitants. We hope that the Colorado State Board of Health will determine with certainty the question of vaccination in each of the 602 cases reported, and determine the relative effects of vaccination in those exposed to smallpox during the present epidemic. It is a pity that in every smallpox epidemic the most strenuous objectors to vaccination can not be the victims of the disease. Sometimes people have to burn their fingers before they can satisfy themselves that the stove is hot.

THE *Journal of the A. M. A.*, under date of December 16, calls attention to a buff subscription blank to be used by those who are renewing

subscriptions and paying Fellowship dues to the American Medical Association. Evidently the one at the A. M. A. office who decides upon color is color blind, for the subscription blank comes as near being lemon color as anything else, and we are of the opinion that Fellows have been handed a lemon when it comes to a decision as to color. Why call attention to color anyway? However, we unite in the appeal to doctors to pay dues and subscriptions promptly, and to aid medical associations in economy in postage, to say nothing of time and drain upon nervous energy in keeping the doctors, the greatest procrastinators in the world, from being delinquent.

SOME of the insurance companies try to make out that they are responsible for medical and surgical treatment of injured workmen in Indiana for a period of thirty days only, and they even manage to make some physicians believe it. Whether liable for thirty or sixty days does not make much difference, insofar as the interests of the injured workmen are protected and attending physicians are paid adequately for the services. In New York the Workmen's Compensation Law has been amended so that now the employer is required to furnish his injured employee medical or surgical care and treatment for as long as the nature of the injury requires. This is as it should be, and Indiana ought to do likewise. Our legislative committee could well take this matter into consideration and endeavor to have the Indiana Workmen's Compensation Law amended.

THE Associated Press is given credit for a news item to the effect that Professor Abbott, of the department of Physics of Purdue University, has perfected a stethoscope by which all sounds of the heart and lungs are greatly amplified. In fact it is stated that through the means of this instrument it is possible to hear the faintest heart or lung sounds all over a room, thus making it possible to demonstrate pathologic lesions to physicians and medical students. In order to verify the newspaper report we have written to some of the reputable physicians of Lafayette concerning the matter and they state that no error has been made in reporting the results obtained. The new instrument is reported as being a most wonderful instrument, and while it needs perfecting it undoubtedly will revolutionize some of our methods of physical diagnosis.

A CONGRESSIONAL investigation seems to have proven that at present the Standard Oil Company makes a net profit of about one and one-half cents per gallon on every gallon of gasoline sold to the luckless public. The investiga-

tion shows that in reality the gasoline is sold to the public at from seven to nine cents per gallon more than it costs when it comes from the refinery. One and one-half cents is a fair average for freight charges in carrying the gas to the various filling stations, and four cents is the expense of marketing, which latter probably includes all of the fancy prices paid for filling stations, salaries of officials, and other expenses some of which probably indirectly go back as Standard Oil Company proceeds. No wonder the Standard Oil Company stock is held at such an exorbitant price, and that such fabulous dividends are declared! Furthermore, it is not surprising that there is a howl about "big business!"

DR. EMIL COUE is coming over from France to heal the sick. His plan is auto-suggestion. That is nothing new to America, but Coue will catch many gudgeons. Coue tells people to say "they feel well" and then to say the same thing to themselves over and over. And sometimes when there is nothing the matter with them it succeeds. Voliva uses the same system. But in case the subject has cancer, or tuberculosis, or typhoid fever, or goitre, or diphtheria, or any real disease it doesn't work. It succeeds only on hypochondriacs, mental diseases and imaginary afflictions.

People ought to save their money and heal themselves. Dr. Coue is quite useless. Let an individual just take up the matter and say indefinitely "I am well," "I am well," until he is tired, and then if there is nothing the matter with him he will be cured. No use, not the least, to call in the services of Dr. Coue and pay him a large fee. But if one has a real disease he had better call in the family doctor.—*Gary Tribune*, Jan. 3, 1923.

THE optometrists are going to ask the present Indiana legislature to pass a law requiring all drivers of automobiles to secure a certificate certifying to the possession of a specified acuity of vision deemed necessary for safe operation of self-propelled vehicles. Probably the law-makers will consider that the law is not practical and can not be enforced. No doubt this is true, for we see little effort put forth to punish reckless drivers or to suppress the altogether too common practice of permitting children to drive automobiles. However, it is a well known fact that many people with very much impaired eyesight, some having only one eye and that defective, are driving automobiles. Because they have had no accidents does not alter the fact that it is infinitely more possible for them to have accidents than those who possess normal eyes. They are a menace to other drivers of vehicles as well as

pedestrians and some means should be adopted to prevent them from operating automobiles on our public highways.

It may be of interest to our readers to know that many of the physicians in Berlin are forced to accept the compensation of Health Insurance societies as the only income derived from the practice of medicine. These German health insurance societies furnish medical services for a monthly fee of one hundred marks for each patient, and it is noted that patients financially well able to secure medical treatment as private patients take advantage of the Health Insurance Law and thus are able to obtain their medical services at the rate mentioned. When we consider that one hundred marks, the monthly charge for medical services, is at present equivalent to two cents in American money, it can be understood how deplorable is the condition of the rank and file of the medical profession of Germany. It is not surprising therefore that we hear of world-renowned professors in medicine, made destitute by the ravages of the war, seeking employment as common laborers, and frantically grabbing at the small teaching fees offered by American or other foreign students. Some of the German physicians are in actual want of the necessities of life and an effort upon the part of American physicians has been made to relieve them of their distress. Yet this very governmental supervision of the practice of medicine would have been foisted upon America, and even had the sanction of some thoughtless physicians. Fortunately, the question of government health insurance in America has been laid on the shelf, temporarily at least.

WE have received numerous letters commenting upon the editorial entitled "The Nursing Problem," published in the November number of THE JOURNAL. Without exception these letters, most of which are from leading surgeons and internists, and a few from heads of hospitals, are in full accord with the opinions expressed in the editorial to which reference is made.

We again reiterate the statement that there is room for the highly trained nurse, and we believe that she should be well compensated for her services, but it is very evident that she will not be available for the great majority of suffering human beings who are in moderate financial circumstances. Furthermore, every day it is getting more difficult to secure the services of trained nurses for the care of patients suffering from communicable diseases or for the care of what are known as "hard" cases. Though we admit knowing highly trained nurses who never hesitate to take any cases, no matter what they

are or where they are, our contention is that there is room for thousands of practical nurses who, having less training and having put less time, money and energy into their training, are willing to work for the modest compensation which the patients of ordinary means are able to pay. They also are less apt to discriminate in the selection of cases to be served. This sentiment is well voiced in the article by Dr. Charles H. Mayo in one of the lay magazines when he makes a plea for the development of one hundred thousand practical nurses.

In commenting upon the marked increase in smallpox in recent years all over the civilized world, in the face of a knowledge that the disease is preventable and that the evidence of this fact is so clear, so unmistakable and so convincing that it is perpetual wonder that opposition can raise its head, the *Journal of the A. M. A.*, December 16, 1922, makes the following pertinent comment: "Neglect of vaccination, and its concomitant, the increase of smallpox, is but one of several striking manifestations of the breakdown of authority in the modern world. No longer do the mass of mankind receive submissively their opinions from the educated and informed. For better or worse they are attempting to form their own opinions and to act for themselves. The age of pure reason, however, has not yet dawned. Too often opinions are based on prejudice, on chance experience, on a persuasive but selfishly interested tongue, on the advertising exigencies of newspapers, on the dictum of a demagogue. To a large extent, this has been true always and everywhere; but what now disturbs many careful students of civilization is the widespread disposition to resent all attempts at direction by the better trained and better educated members of the community. In many places and on many subjects simple advocacy of a cause by the "intelligentsia" has been sufficient to rouse bitter antagonism on the part of the "proletariat." Seemingly few people nowadays want to accept advice or to regard anything as proved unless it has come within the scope of their own experience. But a state of chaos is certainly not the most comfortable state of human existence, and we trust not the final one."

MUCH has been said for and against the treatment of pneumonia with vaccines, and the profession has been led to place considerable confidence in the modified pneumococcus vaccine of Rosenow of the Mayo Clinic. However, the use of Rosenow's name by commercial houses in connection with the whole subject of vaccine therapy has led to the publication of a letter from Rosenow in the *Journal of the A. M. A.*,

December 6, 1922, in which he emphatically states that he does not advocate bacterial vaccines in the treatment of acute infections. He also states that the modified pneumococcus vaccine as recommended by him is not now duplicated by the commercial preparations on the market. This only goes to show that the whole question of vaccine therapy is more or less shrouded in uncertainty if we are to depend upon the average manufacturer of biologic products. In his statement concerning the pneumococcus vaccine he says, "While a member of the John McCormick Institute for Infectious Diseases, Chicago, I discovered that antibodies appear more rapidly in the blood following the injection of partially autolyzed pneumococci ("pneumococcus antigen") than following the injection of heat-killed pneumococci.

"Through the cooperation of Dr. Ludwig Hektoen, director of the Institute, and of physicians at the Presbyterian and Cook County hospitals, the effect of this antigen on the course of lobar pneumonia, as compared with alternate untreated cases, was studied for three consecutive years. The mortality rate was lower in the treated than in the control series. Subsequent studies have corroborated these results.

"During my studies on the bacteriology of influenza in 1918-19 I prepared, from the freshly isolated strains of bacteria, mixed vaccines which appeared to be valuable in prophylactic inoculation against the more serious respiratory infections in influenza.

"The burden of the preparation and distribution of these substances became so large that it seemed best to turn the work over to a commercial firm, and, of course, without financial return to me or to the Mayo Foundation. This was done after I felt satisfied that the details and principles involved, as set forth in published reports, would be fulfilled. It was hoped that information as to the efficacy of the preparations might be obtained, and that relief of human suffering would result pending the evolution of better methods.

"I have found since that samples of the antigen obtained in the open market have fallen short of the original requirements, and that information regarding the use of the antigen and the mixed vaccine has not been forthcoming. Moreover, the impression seems to have spread among physicians that I advocate the use of ordinary bacterial vaccines in the treatment of acute infections. The only statement I have made which perhaps might be so construed appeared in my paper, "Prophylactic Inoculation Against Respiratory Infections in Influenza" (*The Journal*, January 4, 1919, p. 31), which was in the nature of a reply to many inquiries

regarding the use of the vaccine in the treatment of influenza. The statement reads: "Since the severe complications in influenza, such as pneumonia, do not usually begin until the fourth day or later, the vaccine, if given at the onset of the disease, might reasonably be expected to afford some protection." It will be seen that I advocated the use of the vaccine as a prophylactic.

"It is the purpose of this letter to inform physicians that, while I still believe in the efficacy of partially autolyzed (detoxicated) pneumococci in the treatment of lobar pneumonia, and in the use of properly prepared bacterial vaccines for prophylactic inoculations and in certain chronic conditions, I do not advocate the latter in the treatment of acute infections and that henceforth the use of my name in connection with these commercially prepared products will be contrary to my wishes and without my consent."

IN discussing the question of group medical practice, Dr. Martin Fischer, before the Ohio State Medical Association, contends that for the most part commercialism is the guiding influence which leads to the formation of groups of so-called specialists and that both the medical profession and the public suffers through the subsequent failure of such institutions and men to give that which is required for the successful practice of medicine. The doctors engaged in group practice sacrifice their individuality. Never before has the doctor affected the community long through mass action, and it is safe to predict that through such action, he never, lastingly, will. According to Dr. Fischer, the medical profession will increase or lose its public power only as the collective expression of the people's faith in the individual doctors who touch them. The greatest medical achievements were not those of men working in great organizations, but of individuals utilizing to the utmost each his own opportunities. In commenting upon Dr. Fischer's address, the *Journal of the Medical Society of New Jersey* says, "it is time for the medical profession to discard the commercialism and the selling methods of the store, and to return to the methods of the fathers in medicine. It is time for physicians with kindness, tolerance and large understanding, the skill of hand, the skill of mind and the resourcefulness of previous generations." President Butler of Columbia University says some pertinent things concerning the present tendency in medical education when he criticizes the tendency of schools to create specialists rather than general physicians. "It would be a sorry day," says Dr. Butler, "for the public health and for the public satisfaction if the physician of large, practical

experience, wide human sympathy, and keen insight into human nature were to yield his place to the expert with the microscope and the test tube. The scientific aspects of medicine must not be permitted to over-ride its human aspects." Concerning this, the *New York Medical Journal and Medical Record* says, "the true province of the physician is to heal the sick. Under the rapid development of specialism in medicine this function has been lost sight of in some of the larger medical schools, which train scientific investigators instead of physicians. There is a need for scientific investigators, but the crying need is for men of broad, medical education whose senses and powers of observation, as well as their minds, have been carefully trained; men who depend mainly on their own trained powers of observation and deduction rather than on the differential blood count, the sphygmographic tracing of the electrocardiogram, or the findings of the test tube. All of these aids to diagnosis are of value and should be made use of, but none of them can take the place of the trained and acute observer.

"The leaders in medical education have made the mistake of trying to combine the laboratory specialist with the general practitioner, and as a consequence the public has suffered and is suffering from a dearth of doctors."

DEATHS

WILLIAM D. FALL, M. D., of Advance, Indiana, died November 30 at the age of eighty years.

JEROME S. BEELER, M. D., of Evansville, died December 10 at the age of seventy-four years. Dr. Beeler graduated from the Eclectic Medical College of Cincinnati in 1875.

HOWARD SAMUEL PERRY, M. D., died at his home in South Bend, November 29, at the age of thirty-three years. He graduated from the University of Illinois College of Medicine, Chicago, in 1913.

ORTHO P. FRANKS, M. D., of Churubusco, died at his home January 2, at the age of forty-eight years. Dr. Franks was a graduate of the Fort Wayne College of Medicine in 1904 and was a member of the Whitley County Medical Society and the Indiana State Medical Association.

R. F. BLOUNT, M. D., a former Wabash county physician, died at the home of his daughter, in North Manchester, December 15, at the age of ninety-three years. Dr. Blount graduated from Northwestern University Medical

School in 1865 but had not been in active practice for several years.

O. C. LUKENBILL, M. D., of Indianapolis, died December 1, at the Battle Creek Sanitarium, Battle Creek, Michigan. Dr. Lukenbill was fifty-five years of age. He graduated from the Medical College of Indiana, Indianapolis, in 1892. He was a member of the Indianapolis Medical Society, the Indiana State Medical Association and was a Fellow in the American Medical Association.

HOWARD PAUL PRESTON, M. D., of South Bend, died November 29, at the age of forty-eight years, following an attack of acute appendicitis. He graduated from the Chicago Homeopathic Medical College in 1901 and was a member of the St. Joseph County Medical Society, the Indiana State Medical Association and the American Medical Association.

ARTHUR B. WESTFALL, M. D., died at his suite in the Fowler Hotel, Lafayette, December 22, at the age of sixty-two years. Dr. Westfall graduated from the Kentucky School of Medicine, Louisville, in 1890. He was a member of the Tippecanoe County Medical Society, the Indiana State Medical Association and was a fellow in the American Medical Association.

DEAN D. METCALF, M.D., of Fort Wayne, died at the Lutheran Hospital, December 30, following an appendectomy, age 41 years. Dr. Metcalf graduated from the Milwaukee Medical College in 1911. He served with the medical corps of the United States Army during the world war for three years, attaining the rank of major. Dr. Metcalf was a member of the Allen County Medical Society, and the Indiana State Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. A. W. TOBIAS, of Elwood, has gone to Florida to spend the winter.

DR. L. P. COLLINS, formerly of Winamac, has opened offices in Logansport.

THE Washington County Medical Society met Wednesday, December 6, at Salem.

DR. LYNN W. ELSTON, formerly of Chicago, has opened an office in Kendallville where he will practice surgery.

DR. CLEON NAFE has been appointed superintendent of the City Hospital, Indianapolis, to succeed Dr. Richard Poole.

THE Elkhart County Medical Society held a meeting December 7 at Goshen, Indiana. Papers were presented by Drs. D. D. Todd and C. L. Amick, of Elkhart.

THE cornerstone of the nurses' home and administration building of the City Hospital, Indianapolis, was laid December 23 when dedicatory exercises were held.

FORTY-ONE hospitals of Indiana were represented at the annual convention of the Indiana State League of Nursing Education which was held in Fort Wayne, December 14.

DR. J. D. HENDRICKS, who has practiced medicine at Lizton for several years, has given up his practice there and will practice with his brother, Dr. Guy Hendricks, of Indianapolis.

DR. SIDNEY J. MICHEL, of Evansville, was elected president of the Ohio Valley Medical Association at its recent annual session. Dr. Benjamin Floyd, of Evansville, was re-elected secretary and treasurer.

THE Hamilton County Medical Society held its annual meeting at Noblesville, December 12. The following officers were elected for 1923: Dr. C. R. Elfers, Jolietville, president; Dr. Myers, Noblesville, secretary.

THE Clinton County Medical Society held its regular meeting December 7, at Frankfort. The following officers were elected for 1923: C. A. Zinn, president; Dr. F. A. Beardsley, vice-president; Dr. L. L. Harding, secretary.

THE Northeastern Indiana Medical Society held a meeting at Kendallville, December 14. A paper was presented by Dr. Stanley Gibson, the subject of which was "Diphtheria." Physicians attended from Noble, LaGrange, Steuben and DeKalb counties.

THE Monroe County Medical Society held a meeting in December at which time the following officers were elected: Dr. J. E. Moser, president; Dr. William Reed, vice-president; Dr. F. H. Austin, secretary-treasurer.

THE Boone County Medical Society held a meeting at Lebanon, December 5, at which time the following officers were elected for 1923: Dr. James H. Black, president; Dr. John D. Coons, vice-president; and Dr. William H. Spieth, secretary-treasurer.

AT a meeting of the Lake County Medical Society, held December 14, the following officers were elected: Dr. R. T. Hale, of East Chicago, president; Dr. F. A. Malmstone, vice-president, and Dr. E. E. Evans, of Gary, was re-elected secretary-treasurer.

THE Christmas meeting of the Muncie Academy of Medicine was held December 22 at the Hotel Roberts, Muncie. After Santa Claus had presented each member with a present, a paper on "Vaccination Against Pneumonia" was presented by Dr. C. J. Kirshman of Muncie.

THE Elkhart County Medical Society held a meeting Thursday evening, December 14, at which time officers were elected as follows: Dr. W. B. Kreider, of Goshen, president; Dr. B. N. Zimmerman, of Elkhart, vice-president; Dr. S. P. Miller, of Elkhart, secretary and treasurer.

THE Putnam County Medical Society held an open meeting at Greencastle, December 14. Illustrated lectures on cancer and its treatment were given. The speakers included Dr. Goethe Link, Dr. T. C. Kennedy and Dr. C. F. Voyles, all of Indianapolis. The public was invited to attend the meeting.

THE Carroll County Medical Society held a meeting December 15 at Delphi, Indiana. Officers were elected as follows: Ed. Wagoner, of Burrows, president; Dr. H. Y. Mullin, of Rockfield, vice-president; Dr. John Flora, of Flora, secretary. A paper was presented by Dr. M. M. Lairy, of Lafayette.

AT the regular meeting of the Randolph County Medical Society, held December 11 at Winchester, the following officers were elected for the ensuing year: Dr. F. McK. Ruby, Union City, president; Dr. A. Henderson, Ridgeville, vice-president; and Dr. John S. Robison, of Winchester, secretary-treasurer.

THE Howard County Medical Society held its annual meeting at Kokomo, December 8. Officers were elected for 1923 as follows: Dr. W. H. Harrison, president; Dr. Bruce Lung, vice-president, and Dr. Florence Olmstead, secretary-treasurer. Dr. George Marshall was elected delegate to the state convention.

Two gifts of \$1,125,000 each have been given to the College of Medicine, University of Iowa. One is from the general education board and the other from the Rockefeller Foundation. The money will be used to build a new hospital and laboratory and to equip them.

THE St. Joseph County Medical Society held a meeting at South Bend, December 5, the following officers being elected for 1923: Dr. H. F. Mitchell, president; Dr. Albert D. Huffman vice-president; Dr. R. B. Dugdale, secretary-treasurer. Dr. C. M. Eisenbeiss was chosen as delegate to the state convention.

THE Huntington County Medical Society held a meeting at Huntington, December 5. Dr. Charles Sowder, of Indianapolis, presented a paper on "Symptoms and Treatment of Cardiopathies." Officers were elected as follows: Dr. M. C. Clokey, president; Dr. R. G. Johnston, vice-president, and Dr. Mark G. Erehart, secretary-treasurer.

At the annual session of the Indiana division of the American College of Surgeons, held at Evansville, December 4 and 5, the following officers were elected: President, Dr. Albert E. Bulson, Jr., Fort Wayne; secretary, Dr. E. E. Padgett, Indianapolis; councilor, Dr. G. D. Scott, Sullivan. The next session is to be held in Fort Wayne in December, 1923.

DURING December, the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Powers-Weightman-Rosengarten:

Arsenobenzol-Billon.

Merck & Company:

Digitan Ampules (for Hypodermic Use).

Digitan Ampules (for Oral Use).

THE Gibson County Medical Society held a meeting at Princeton, December 11. The following officers were elected for 1923: Dr. S. I. Arthur, of Patoka, president; Dr. O. T. Brazelton, of Princeton, vice-president; Dr. A. H. Rhodes, secretary-treasurer. Dr. W. B. Ashby, of Louisville, presented a paper on "Problems in Urology of Importance to the General Practitioner."

THE Central Section of the American X-Ray Society will hold its mid-winter meeting in Louisville on Saturday, February 24, 1923, for one day, including an evening session. The officers of this Society are: E. C. Ernst, St. Louis, Mo., president; John T. Murphy, Toledo, Ohio, first vice-president; B. R. Kirklin, Muncie, Indiana, second vice-president; and D. Y. Keith, Louisville, Kentucky, secretary. All members of the Indiana State Medical Association are invited to attend.

SOCIETY PROCEEDINGS

COUNCILORS' MEMBERSHIP CONTEST

District	Councilor	Number of Counties	1921 Membership	1922 Membership to Date	Percentage
First.....	Dr. Willis	7	176	175	.99
Second.....	Dr. Smadel	7	149	148	.99
Third.....	Dr. Leach	9	130	119	.91
Fourth.....	Dr. Osterman	10	138	137	.99
Fifth.....	Dr. Weinstein	5	158	166	1.05
Sixth.....	Dr. Spilman	8	150	162	1.08
Seventh.....	Dr. Earp	4	425	445	1.06
Eighth.....	Dr. Conrad	5	172	169	.98
Ninth.....	Dr. Moffitt	10	253	257	1.02
Tenth.....	Dr. Shanklin	5	151	147	.97
Eleventh.....	Dr. Black	6	191	194	1.02
Twelfth.....	Dr. Van Sweringen	8	241	247	1.02
Thirteenth.....	Dr. Berteling	8	274	259	.95
		92	2608	2630	

TIPPECANOE COUNTY

The September meeting of the Tippecanoe County Medical Society was called to order at Lahr Hotel, Lafayette, on September 26 by President Ruschli. Minutes of previous meeting approved as read.

Dr. Lairy moved that the legislative committee be instructed to confer with the local legislative members as to the drafting, introducing and enacting of a bill requiring the State Board of Health to *tabulate* deaths according to the place of residence, so as not to have hospital communities such as Lafayette credited with an unfair death rate because of the non-resident deaths occurring in its institutions. This motion was seconded and carried.

Dr. Lairy read a paper on "Myocarditis". He treated the subject more from the standpoint of etiology and symptoms as gleaned from practical experience, deep study and observations made from insurance examiners' reports. He stated he had purposely abstained from discussing treatment, and other heart lesions, as endocarditis.

The heart's labors were commented upon and this was expressed in terms of measurement by enumerating the number of liters of blood pumped during a well rounded-out life. Myocarditis, as a rule, is an accumulation of disturbed cell metabolism resulting from chronic infections and their toxins, covering usually a long period and thus occurring most frequently in the decades of the middle and latter part of life. In this it differs from endocarditis, which is most commonly found as a complication or sequela of acute infections in early life.

Members present, 33. Visitors, 2.

Adjourned.

Regular October meeting called to order by Vice-President Romberger at Lahr Hotel, October 24. Minutes of last meeting read and approved without change.

Dr. A. B. Thompson of Soldiers' Home made application for membership by card from Spencer county. The chair declared Dr. A. B. Thompson to be accepted as a member of this Society.

It was moved and seconded that a committee of three be appointed to act as censors of all public press articles issued by the Tippecanoe County Tuberculosis Association concerning any of their activities in which the medical profession is associated, the president to appoint the chairman, and he to select the other two. The motion carried and Dr. Shafer was appointed chairman.

Then by request of the president, Dr. Lairy introduced the speaker of the evening, Dr. J. L. Tierney of St. Louis, who gave a very able talk on the subject, "Diagnostic Signs of Endocrine Disease", which was illustrated throughout by lantern slides. His

lecture was mainly on his findings and conclusions as gleaned from practical clinical studies rather than laboratory experimentation. He dealt mainly with pituitary experimentation and medication.

Synopsis: Two lobes used, the anterior and the posterior; the body not as yet claimed as having any special merit. Each lobe has its own function. Thus a hypo-secretion or a hyper-secretion of either lobe or of both lobes produces definite clinical manifestations. The anterior lobe associated with bony development, and with under secretion or over secretion gives definite clinical manifestations, and these vary with age at time of departure from normal. The posterior lobe associated with carbohydrate metabolism, and its manifestations also vary with age. The dividing line of age variation is at the period of adolescence: the period in development when there is marked change as to growth, sexuality and various psychic manifestations.

Endocrine disease not hereditary condition. May start any time. Often follows acute infections, as typhoid. Seems a reciprocal relation between pituitary and thyroid.

Treatment: Earlier in the disease the better; therefore, must be promptly recognized and treatment pushed. Therapy according to symptomatology. Dosage not known: start with small as m.v. and push until get intestinal reaction, as cramping, with bowel action twenty minutes after dose. Intervals between doses vary from daily up to weekly. Don't use mixtures, but one element. Do your own selecting instead of depending upon nature to exert selective action on conglomerate mixtures. Base therapy on clinical signs. Stick to one brand. Best results by hypodermic administration. Push one gland; no results, stop: then another gland; no results, stop: then try combined glands.

In testicular deficiency, orchitic extract not fully proven efficient. Thyroid has its place: sometimes combined with pituitary.

Ovarian extract sometimes effective. Corpus luteum sometimes effective.

Discussion:

DR. KEIPER: Commercial aspect lamentable. Endocrinology in the field of psychology is very alluring.

DR. SCHREIBER: Maximum thyroid not manifest for several days. Is thymus gland good in arthritis?

DR. BURLINGTON: Good results in vitelligo with ovarian extract.

DR. PYKE: Ovarian extract in vomiting of pregnancy: how soon to expect results?

DR. HUTTON, Chicago: Ovarian extract gives many good results. Administered hypodermatically gives best results. Diagnosis mainly on history and physical findings. More thyroid disturbances around Great Lakes, especially hypothyroidism, 4 to 1.

Discussion closed by Dr. Tierney: Extract pancreas of young beef by Canadian workers is epoch making in contrast to ordinary.

Endocrines have relationship to criminology.

Thyroid extract effects prolonged to 15 days. Thyroxin: probably good; if as claimed, it is ideal.

Use one brand and stick to it.

Pigmentations and lack of pigmentations are often of endocrine origin, as in Addison's disease.

Corpus luteum sometimes removes vitelligo.

A rising vote of thanks was extended by the Society and its guests to Dr. Tierney for his excellent address.

Members, 31. Visitors, 11.

Adjourned.

After a six o'clock dinner at Lahr Hotel, November 28, regular meeting called to order by President

Ruschli. Minutes of previous meeting read and approved without change.

Application for membership of John Oliver Eiler was read and allowed to take the usual course.

The secretary read a communication from the Standard Auto Insurance Co. of Vincennes relative to automobile insurance for doctors, members of the State Society. For enlightenment on the subject, our state delegate, Crockett, made remarks relative to the action taken by the State Society. No formal action was taken, but the secretary was to furnish said company with a membership list so the company could communicate with each member individually.

An amendment to the constitution and by-laws which had been offered Nov. 29, 1921, relative to designating the day in the month for holding the regular monthly meeting, was taken up for final action. On proper motion the amendment was adopted: namely, the regular monthly meeting be held on the first Tuesday after the first Thursday of each month excepting the summer vacation months, July and August. The same to be in effect as of January, 1923.

Dr. Romberger read the paper of the evening, entitled "Lafayette Plan Draping for Thyroid Surgery: New Goiter Mask and Modified Gas-Oxygen Apparatus: Preliminary Report on Somnoform as a Synergist." All being illustrated by lantern slides.

He illustrated and described his own devised apparatus and method of draping in thyroid operations by which the anesthetist and his apparatus were out of the way and screened from contaminating the field of operation. He also described his own devised apparatus for gas-oxygen anesthesia, which consisted of a complete duplication of equipment so adjusted that any set of units could be interchangeably switched in case of necessity arising from faulty action. A very valuable, practical consideration for the successful continuation and completion of a process that dare not be interrupted.

He also displayed and described his own original apparatus inducting a controlled somnoform synergist. In all of these he showed much originality and ingenuity as the result of much thought and deep study.

Members present, 27. Visitors present, 5.

Adjourned.

Regular meeting called to order by Vice-President Romberger at Hotel Lahr, on December 26. Minutes of last regular meeting and of special meeting read and approved without change.

The amendment relative to Contract Family and Lodge Practice proposed at the last meeting was adopted by a large majority vote.

The application for membership of Dr. John Eiler was voted upon, resulting favorably, and he was declared a member.

Next in order was the election of officers for the coming year.

There was but one nomination made for each office, and in each instance the secretary was instructed to cast the ballot for the candidate, with the election resulting as follows: President, Floyd T. Romberger; vice-president, Oliver E. Griest; secretary, William M. Reser; treasurer, Charles Hupe; delegate, Franklin S. Crockett; censor, George R. Clayton.

Dr. Lairy, chairman Legislative Committee, reported activity but no progress. He stated that State Senator Southworth had expressed himself to the committee as opposed to strengthening the medical practices act if by so doing there would be any hardships or restrictions accrue to the chiropractors or the Christian scientists. Chairman Lairy stated that the two Representatives had not been interviewed. The report was received and the committee continued.

Dr. Lairy also reported receiving a communication from Dr. Hurty in which he stated his intention of introducing a bill in the coming session of the legislature that would make radical changes in the workings of the state's department of health.

Dr. McClelland made a verbal report on an article which described the unscientific, the illogical and preposterous dogma known as the "Abrams Treatment". This was commented upon by numerous members present.

Members present, 22.

Adjourned.

WM. M. RESER, Secretary.

FLOYD COUNTY

The Floyd County Medical Society met in annual meeting at the Tavern Hotel, New Albany, on December 8. The president, Dr. William Moore, being confined to his home on account of illness, Dr. C. P. Cook, the vice-president, presided.

Roll call and reading of the minutes.

The chairman appointed a committee of five, as follows, Drs. J. W. Baxter, J. E. Bird, F. H. Wilcox, E. T. Tyler and William Starr, to call upon our representative and joint representative in regard to medical legislation.

The following are the officers elected for the coming year: President, Dr. C. P. Cook; vice-president, Dr. George Day; secretary-treasurer, Dr. P. H. Schoen; censors, Dr. H. B. Shacklett, Dr. R. W. Harris and Dr. J. Y. McCullough. Delegates to the State Medical Association to be chosen later.

A banquet was a feature of the meeting, and after a short social session, meeting adjourned.

P. H. SCHOEN, Secretary.

WELLS COUNTY

The Wells County Medical Society held a meeting on December 4 in the office of Dr. Louis Severin, Bluffton. Dr. O. G. Hamilton was elected to membership, and the following officers for the new year were named: President, Dr. Louis Severin; first vice-president, Dr. G. B. Morris; second vice-president, Dr. C. H. Mead; secretary-treasurer, Dr. S. A. Shoemaker; delegate to State Association, Dr. S. A. Shoemaker, with Dr. F. A. Metts, alternate; board of censors, Dr. C. H. Mead, Dr. F. A. Metts, and Dr. D. C. Wybourn.

Following the business meeting an oyster supper was enjoyed at the Inn Cafe.

Adjourned.

S. A. SHOEMAKER, Secretary.

SULLIVAN COUNTY

The Sullivan County Medical Society met at Sullivan on December 6. Dr. Ernest Ruple of Indianapolis presented a paper on "The Relation of the Prostate and Seminal Vesicles in General Practice". Dr. Thrasher of Indianapolis led the discussion.

Officers for the ensuing year were elected as follows: President, Dr. H. C. O'Dell, Farmersburg; vice-president, Dr. J. B. Maple, Sullivan; secretary-treasurer, Dr. J. S. Brown, Carlisle.

Adjourned.

H. C. O'DELL, President.

ORANGE COUNTY

At a meeting of the Orange County Medical Society held in Paoli on December 12 the following officers were elected for the year 1923: President, H. L. Miller, West Baden; vice-president, J. R. Dillinger, French Lick; secretary-treasurer, J. I. Maris, Paoli (re-elected). The secretary was directed to ask the

local senator and representative to support legislation to put teeth in the medical practices law.

Adjourned.

J. I. MARIS, Secretary.

CORRESPONDENCE

CASE REPORTS OF HUMAN ACTINOMYCOSIS REQUESTED

Rochester, Minn., Dec. 6, 1922.

To the Editor:

I am endeavoring to make a complete study of the distribution of human actinomycosis in this country. The number of cases reported in the literature is surprisingly small, and I know that the disease is not so rare as is sometimes thought. I shall greatly appreciate hearing directly from anyone who has had experience with this disease, and desire to know concerning case histories the following: Age, sex, occupation, residence, state in which the disease was contracted, location of lesion, duration of symptoms, and any special points of interest connected with the treatment, outcome of the disease, or necropsy findings.

A. H. SANFORD, M.D., Mayo Clinic.

NURSING PROBLEMS

Auburn, Ind., Dec. 12, 1922.

To the Editor:

I wish to express my hearty approval of your article, or rather editorial, entitled "The Nursing Problem," which was treated so frankly and honestly. There are a few other phases of the problem which might be mentioned at this time.

The one uppermost in mind is the nonethical conduct of nurses in relation to physician and patient. An illustration or two probably will elucidate more clearly what is meant than a long discussion. A physician and nurse are in charge of a case. The nurse may have certain ways of treating the patient she is caring for which she may have learned in hospital training or from some favorite practitioner and from which she cannot break away. While the physician is away she takes the role of the old woman, or the busybody, and imparts the news to the family that the patient is not getting the best of treatment, or the doctor employed is not doing as well as some other physician might do. The results in such an instance may be foretold, especially if the patient did not improve as rapidly as the family would like, or if a relapse should occur. Another phase of the same problem may be illustrated by the nurse who during her hospital training becomes much impressed through either ability or favors (mostly favors) with certain doctors, or possibly her favoritism may be limited to but one. She is called on a case with a physician who for some reason is not favorable to her. She is so over-anxious to show her favoritism that she may take advantage of her position either by shirking her work or by omitting it entirely, so that the physician employed cannot get the results he desires. The results again are easily foretold.

The production of "super nurses", as was advocated in one school, who can treat as well as nurse, and the high prices, etc., etc., will tend to eliminate the trained nurse, and the nurse with less training will take her place. The elimination of the unethical nurse, or rather her methods, is an entirely different problem, and one even more serious to the physician than the demanding of high prices, shorter hours, etc. It has become so serious in some places that physicians are compelled to have their own nurses in order to maintain their practice.

Very respectfully,

CHARLES R. CLARKE.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

VEN CALCIUM CACODYLATE AMPULES, $\frac{3}{4}$ grains: 1 Cc. contains calcium cacodylate-IpcO (see New and Nonofficial Remedies 1922, p. 55), 0.05 Gm. ($\frac{1}{2}$ grain).

VEN CALCIUM CACODYLATE AMPULES, $1\frac{1}{2}$ grains: 1 Cc. contains calcium cacodylate-IpcO, 0.097 Gm. ($1\frac{1}{2}$ grains).

VEN CALCIUM CACODYLATE AMPULES, 3 grains: 1 Cc. contains calcium cacodylate-IpcO, 0.195 Gm. (3 grains).

VEN CALCIUM CACODYLATE AMPULES, 5 grains: 1 Cc. contains calcium cacodylate-IpcO, 0.324 Gm. (5 grains).

VEN CALCIUM CACODYLATE AMPULES, 7 grains: 1 Cc. contains calcium cacodylate-IpcO, 0.453 Gm. (7 grains). Prepared by the Intra Products Co., Denver, Colo.

MERCURIALIZED SERUM-LEDERLE FOR INTRAVENOUS INJECTION.—Each package contains the equivalent of $\frac{1}{3}$ grain (0.022 Gm.) of mercuric chloride in 8 Cc. normal horse serum. The initial dose is $\frac{1}{12}$ grain of mercuric chloride. This may be increased gradually to $\frac{1}{3}$ grain. For a discussion of the actions, uses and dosage of mercurialized serum, see New and Nonofficial Remedies 1922, p. 189. Lederle Antitoxin Laboratories, New York.

SILVOL.—A brand of protargin mild-N. N. P. (See New and Nonofficial Remedies 1922, p. 326). Silvol is a compound of colloidal silver with an alkaline proteid and contains about 20 percent of silver. Parke, Davis & Co., Detroit.—(*Jour. A. M. A.*, Dec. 9, 1922, p. 2001).

ARSENOBENZOL-BILLON.—A brand of arsphenamine-N. N. R. For actions, uses and dosage, see New and Nonofficial Remedies 1922, p. 43. Arsenobenzol-Billon is marketed in ampules containing, respectively, 0.1, 0.2, 0.3, 0.4, 0.5, and 0.6 Gm. of arsenobenzol-Billon.—(*Jour. A. M. A.*, Dec. 16, 1922, p. 2085).

PROPAGANDA FOR REFORM

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Simmons' Cough Syrup (A. B. Richards Medicine Co.), consisting essentially of ammonium chlorid, glycerin, chloroform, vegetable extracts, alcohol, sugar and water, flavored with anise; Hobbs' Nerve Pills (Hobbs Spanish-American Medicine Company), consisting essentially of powdered iron, quinin, licorice, starch and traces of arsenic and strychnin; Mando Tablets (Garcey's Drug Store), containing extracts of nux vomica and damiana; Castleberry's Sexual Pills (Allan-Pfeiffer Chemical Co.), consisting of an iron compound, extracts of Spanish fly and nux vomica, chalk and sugar; Fackler's Compound Extract of Damiana, consisting of extract of plant drugs, including nux vomica, damiana and saw palmetto and also extract of Spanish fly, sugar, alcohol and water.—(*Jour. A. M. A.*, Dec. 2, 1922, p. 1949).

SILICON IN TUBERCULOSIS.—In Germany the use of preparations of silicon in the treatment of tuberculosis has been proposed on the assertion that silica was found in calcified tuberculous lesions and lung stones and that, consequently, silicon, as well as calcium, is an important element in the formation of the beneficent scar tissues whereby the lesions are healed. However, Mayer and Wells of the University of Chicago find that the content of silica is no larger than one finds in comparable uncalcified tissues of adults. The use of silicon in therapy requires better evidence than is now available.—(*Jour. A. M. A.*, Dec. 2, 1922, p. 1935).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Hebras Blood, Liver and Nerve Tonic (G. C. Bittner Co.), consisting essentially of epsom salt, a small amount of plant material, a trace of salicylic acid and water. Hull's Superlative Compound (A. J. Hull Medicine Co.), consisting essentially of extracts of plant drugs, including cinchona, a volatile oil, alcohol and water. Hull's Superlative Liniment (A. J. Hull Medicine Co.), consisting of oils of cedar, thyme and probably wormwood, camphor and alcohol. Bristol's Sarsaparilla Compound (Lanman & Kemp, Inc.), consisting essentially of alcohol, sugar, potassium iodid and small amounts of ex-

tractives of vegetable drugs including a laxative, and traces of a volatile oil. Kemp's Anacahuita Pectoral Compound (Lanman & Kemp, Inc.), consisting essentially of alcohol, sugar and small amounts of vegetable extractives, magnesium and ammonium salts.—(*Jour. A. M. A.*, Dec. 9, 1922, p. 2021).

NEUTRAL ACRIFLAVINE IN SEPTICEMIA.—Neutral acriflavine has been used intravenously in septicemia and similar conditions, but the available evidence does not demonstrate the value of the drug in these conditions. Also, the available evidence is insufficient to judge whether the intravenous use of the drug has dangers other than those inherent in intravenous medication.—(*Jour. A. M. A.*, Dec. 9, 1922, p. 2023).

THE PROPAGANDA FOR REFORM IN ESTHONIA.—Physicians the world over have long recognized that the claims for proprietary medicines put forward by those who are financially interested in their sale are always over-optimistic, often unwarranted and not infrequently deliberately misleading and fraudulent. It is, natural, therefore, that the widespread significance of the work of the Council on Pharmacy and Chemistry of the American Medical Association should have attracted the attention of the medical profession of all civilized countries and suggested the inaugurating of similar reform. An institute for drug control has been established in The Netherlands. Efforts toward the establishment of bodies patterned after the Council on Pharmacy and Chemistry have been reported in the past from Germany, Italy and Belgium. Now comes a message from Esthonia—formerly a Baltic province of Russia, but now an independent state—that the achievements of our Council are an incentive toward the inauguration of similar work in that country.—(*Jour. A. M. A.*, Dec. 9, 1922, p. 2020).

"ESTEROL NOT ADMITTED TO N. N. R."—"Esterol" is the proprietary and non-descriptive name under which the firm of Frederick Stearns & Co. markets benzyl succinate. Benzyl succinate has been admitted to New and Nonofficial Remedies. Its properties are similar to those of benzyl benzoate, but being insoluble it is almost tasteless and does not produce gastric discomfort. The Council on Pharmacy and Chemistry declared the proprietary brand of benzyl succinate sold as "Esterol" inadmissible because: (1) Stearns & Co. are neither the discoverers of the product nor of the therapeutic properties and therefore are not entitled to apply a proprietary name to the product. (2) The labels of the trade packages contain recommendations for the use of Esterol in dysmenorrhea, asthma, colic, hiccup and thus advertises it indirectly to the public.—(*Jour. A. M. A.*, Dec. 16, 1922, p. 2102).

CLUTTERING UP PHARMACEUTICAL NOMENCLATURE.—Esterol is Frederick Stearns & Co.'s proprietary name for benzyl succinate. The product *per se* is unobjectionable. The fundamental objection to Esterol and the chief reason for its nonadmission to New and Nonofficial Remedies is its name. A multiplicity of names for any one medicinal substance is against the interests, not only of scientific prescribing, but also of public welfare. When acetanilid was first introduced under a thousand and one names, cases were reported in medical literature of physicians calling for acetanilid under two or more names in the same prescription. More recently there was the ridiculous duplication of names for hexamethylenamin. Later yet came the even greater duplication in the case of phenophthalein. Had Stearns & Co. been content to market their brand of benzyl succinate as benzyl succinate-Stearns, the product as far as the name is concerned would have been acceptable for New and Nonofficial Remedies. Such a name would

give the firm any legitimate protection which it should desire and at the same time give physicians full information about its composition.—(*Jour. A. M. A.*, Dec. 16, 1922, p. 2090).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Allen's Ulcerine Salve (J. P. Allen Medicine Co.), consisting essentially of lead soap and linseed oil. Ward's Celebrated Liniment (Dr. Ward's Medical Co.), consisting of alcohol, soap, sassafras oil, extract of red pepper and colored water. Ward's Lung Balsam (Dr. Ward's Medical Co.), consisting of chloroform, menthol, tar, ipecac extract, ammonium chlorid, sugar, alcohol and colored water. Ward's Kidney and Bladder Remedy (Dr. Ward's Medical Co.), consisting of extract of bearberry and cascara sagrada, sodium phosphate, sodium acetate, alcohol and water sweetened with saccharin and flavored with lemon oil. Ward's Sarsaparilla Compound (Dr. Ward's Medical Co.), consisting of sarsaparilla extract, anise oil, sassafras oil, a trace of potassium iodid, alcohol and colored water. Ward's Kidney and Backache Pills (Dr. Ward's Medical Co.), consisting of methylene blue, bearberry, digitalis, aloes, a trace of buchu and an aromatic oil. Durand's Swiss Herb Tea (Durand Medicine Co.), consisting of a mixture of plant drugs including senna, fennel seed, orange peel, licorice root, juniper berries, althea root, sassafras bark, lavender flowers, buckthorn bark, red clover tops and saffron.

FERRALINE (Ferraline Medicine Co.), consisting essentially of iron sulphate with other iron compounds and water. Crab Orchard Mineral Water (L. H. Goodwin & Co.), a highly mineralized water, the dissolved mineral matter consisting chiefly of Glauber's and Epsom salts.—(*Jour. A. M. A.*, Dec. 16, 1922, p. 2103).

ABSORBINE JR.—A liniment almost identical in physical appearance may be made from the following formula: Oil of wormwood, 1 dram; oil of sassafras, 26 minims; menthol, 15 grains; acetone, sufficient to make 11 drams.—(*Jour. A. M. A.*, Dec. 23, 1922, p. 2184).

COLLENE NOT ACCEPTABLE FOR N. N. R.—Collene (Collene Laboratories, Inc., New York) is said to be a solution in distilled water of 0.05 percent of colloidal silver in the metallic state. Many sweeping statements are made of superiority and therapeutic value of Collene, but they are based on no adequate evidence. Aside from the general misleading tenor of the advertising, the Council on Pharmacy and Chemistry found when it took up the consideration of Collene discrepancies between facts and claims. The Collene Laboratories claimed 0.05 percent of colloidal silver, while the Council's examination showed that, in effect, the silver content of Collene was not colloidal but ionic. The ionic content of Collene indicates that the antiseptic effect of Collene is of similar origin to that of silver nitrate and not to its alleged colloidal nature. In view of the ionic silver present the claimed non-toxic effects are inherently improbable.

Instead of being acid free as claimed, Collene has a slight acidity and this may be responsible for its irritant effects on sensitive tissues. The Council declared Collene not acceptable for New and Nonofficial Remedies because its composition is not correctly declared and because of the extravagant and misleading tenor of the advertising.—(*Jour. A. M. A.*, Dec. 23, 1922, p. 2181).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Lungardia (Lungardia Co.),

consisting essentially of kerosene oil, turpentine oil, cassia oil, clove oil, extract from a laxative plant drug, sugar, gum, alcohol and water. Garrin's Blood Purifier and Tonic (Garrin Medicine Co. and Ashville Medicine Co.), consisting essentially of alcohol, glycerin, sodium benzoate and water with extracts of plant drugs, including golden seal. Deer Lick Spring (California Medicinal Springs Co.), water containing mineral matter consisting chiefly of chlorids of sodium, magnesium and calcium, sulphate and bicarbonate of calcium, and sulphid of sodium. Lee's Hazel Antiseptic Cones (Hazel Hygienic Co.), perfumed suppositories composed of boric acid, sodium salicylate, a trace of zinc salt and cacao butter.—(*Jour. A. M. A.*, Dec. 23, 1922, p. 2182).

HAYES' ASTHMA REMEDY.—This preparation is exploited by P. Harold Hayes, Buffalo, N. Y. Some years ago, six of the seven remedies were examined. The analysts reported one, a cough medicine, to contain oils of turpentine, peppermint, etc., emulsified and sweetened. A second contained potassium iodid. A third preparation was reported to contain potassium, sodium and ammonium iodid. A fourth preparation contained iron peptonate. A fifth preparation consisted of capsules containing quinin sulphate. A sixth preparation consisted of pills which contained as their active constituent resin of jalap.—(*Jour. A. M. A.*, Dec. 30, 1922, p. 2248).

TWO ELECTRONIC DIAGNOSES OF ABRAMS.—Instead of the blood of a patient, a physician sent the blood of a guinea pig to one J. W. Eisiminger of Oklahoma City, who operates a physico-chemical laboratory for the electronic reactions of Abrams. Eisiminger is an osteopath. The report received by the physician on the patient, whose history was sent in, reads as follows:

"Congenital diminished resistance, cerebro-spinal and digestive strain, 39 ohms. Metastatic Carcinoma, 6 Liver and right colon, Tuberculosis Genito-urinary tract, 6 ohms. Colicsepsis, 4 ohms, streptococci, infection, 12/25 ohms, in gall bladder region."

Another physician states that he sent Eisiminger some sheep's blood on blotting paper with a blank supposedly for a fifteen-year-old boy. This physician received the following diagnosis:

"Congenital diminished resistance cerebro-spinal strain 38 ohms. Metastatic carcinoma of left lung and pancreas, 8 ohms. Neisserian infection genito-urinary tract, eyes, 4 ohms. Tuberculosis of genito-urinary tract, 4 ohms."

However, it is possible that these blood specimens were not taken in subdued light and that Eisiminger was not informed if the subjects had red hair nor of their religious faith—factors which are said to play an important part in diagnoses made by the Abrams method.—(*Jour. A. M. A.*, Dec. 30, 1922, p. 2247).

BOOK REVIEWS

A DIABETIC MANUAL FOR THE MUTUAL USE OF DOCTOR AND PATIENT. By Elliott P. Joslin, M.D., Assistant Professor of Medicine, Harvard Medical School; Consulting Physician Boston City Hospital; Collaborator to the Nutrition Laboratory of the Carnegie Institution of Washington, in Boston; formerly Lieutenant-Colonel, M.C., United States Army. Illustrated Second Edition, Thoroughly Revised. Cloth. Pp. 191. Published by Lea & Febiger, Philadelphia and New York, 1919. Price \$1.75.

Though compiled under the unfavorable conditions of the war, the first edition of this excellent little guide met so welcome a reception as to prompt the author to rewrite it according to still later concepts

(Continued on Advertising Page XX)

The PREMIER Product of Posterior Pituitary active principle



Headquarters
for
the
ENDOCRINES

PITUITARY LIQUID

(Armour)

free from preservatives, physiologically standardized. 1 c. c. ampoules surgical, $\frac{1}{2}$ c. c. obstetrical. Boxes of six. A reliable oxytocic, indicated in surgical shock and post partum hemorrhage, and after abdominal operations to restore peristalsis.

Suprarenalin Solution

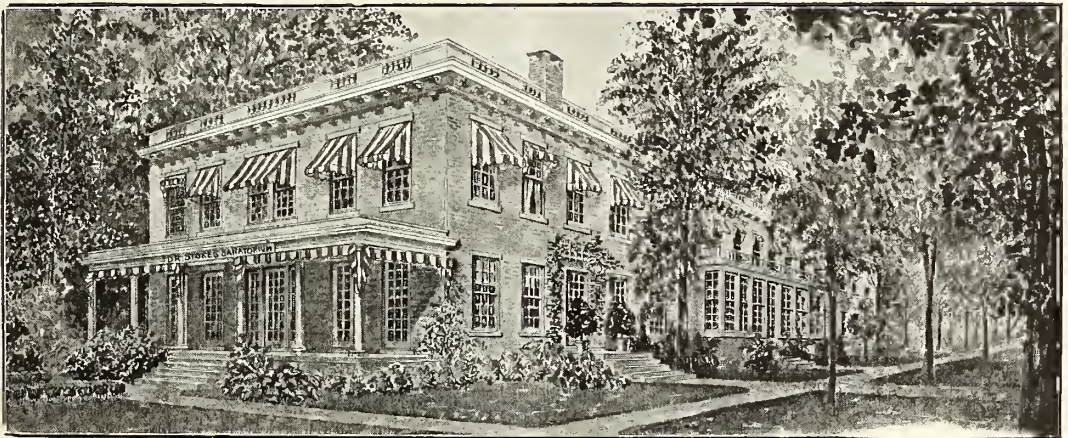
1:1000—Astringent and Hemostatic

Water-white, stable. In 1-oz. bottles, with cup stopper. Of much service in minor surgery, E. E. N. and T. work.

ARMOUR AND COMPANY

CHICAGO

DR. STOKES SANATORIUM



HOME FOR THE INCURABLE INSANE, AGED AND INFIRM

A strictly modern sanatorium, fully equipped for the scientific treatment of all nervous and mental affections. Situation retired and accessible.

Alcoholic and Drug Habit Treated by the Gradual Reduction Method Only

An addition of thirty rooms has lately been added to our already large sanatorium. This makes it possible for us to separate all male and female mental patients. For details write

DR. STOKES SANATORIUM

923 Cherokee Road

EDGAR W. STOKES, M.D., Supt.

Louisville, Kentucky

(Continued from page 32)

in the treatment of diabetes. Hence it has been made what it is—at once a reliable guide for the regime of the diabetic and a legend of optimism which should offer a world of comfort to the sufferer from this heretofore malignant malady.

REGIONAL ANESTHESIA (Victor Pauchet's Technique).

By B. Sherwood-Dunn, M.D., Officer D'Academie; Surgeon (Colonel) Service de Sante Militaire de Paris; Physician to the Cochin Hospital. With 224 Figures in the Text. Pp. 294. Cloth. Price \$3.50. F. A. Davis Company, Publishers, Philadelphia, 1920.

This excellent little book represents a resumé of the work of Professor Victor Pauchet, the leading exponent in France of regional anesthesia, a method differing from the infiltration technique of Reclus in that the nerve is injected either at its point of origin or close thereto along its trunk. During and since the war there has developed sufficient improvement in the method of regional anesthesia as to make it available in 80 percent of surgical operations. In this book the beginner is encouraged to practice striking the foramina of the skeleton with a hatpin and to continue his experimentation on the cadaver, the statement being made that with four hours of such practice, trials may be made on the living subject.

One of the greatest advantages of regional anesthesia over the infiltration method is the freedom from the deformity incident to local distention of tissue and hence more accurate technique especially in operations requiring delicate dissection.

To anyone desiring to pursue this line of work the book serves as an excellent guide.

STANDARD NOMENCLATURE OF DISEASES AND PATHOLOGICAL CONDITIONS, INJURIES, AND POISONINGS FOR THE UNITED STATES. First Edition. Department of Commerce, Bureau of the Census, Sam L. Rogers, Director Government Printing Office, Washington, 1920.

A commendable effort is made through a number of cooperating agencies, such as the Council of National Defense, the United States Public Health Service, the Surgeons General of the Army and Navy, the Association of Medical Colleges of America, the Catholic Hospital Association, several large life insurance companies, the Bureau of Vital Statistics of the Census Department, the Mayo Clinic, the American Nurses' Association, etc., so to correlate medical nomenclature as to obviate the confusion so often arising from two or more names for the same condition. This being a first edition, free criticism is solicited. It is unfortunate that although invited to assist, no provision has been made by the American Medical Association to do its part in this commendable service.

PRACTICAL MEDICINE SERIES, Volume IV Pediatrics.

Edited by Isaac A. Abt, M.D., Professor Pediatrics Northwestern University Medical School, etc., with the Collaboration of A. Levinson, M.D., Associate Pediatrician Michael Reese Hospital; Orthopedic Surgery, Edited by Edwin W. Ryerson, M.D., Associate Professor Orthopedic Surgery Rush Medical College, etc., with the collaboration of Robert O. Ritter, Associate Attending Orthopedic Surgery Children's Memorial Hospital. Series 1920. Cloth, pp. 256. Price \$1.75. The Year Book Publishers, Chicago.

Among the many interesting things reviewed by Dr. Abt in this number is the von Pirquet Feeding System wherein the calorie is replaced by a more simple term, N. E. M. (*Nutritionis Elementum*), or

the value of one gram of mother's milk. The editor believes that though the method is simpler than it would at first seem, it is yet too soon to judge of the universal adoption of the plan. Other interesting chapters are those on child welfare and the acute infections, especially the various encephalitides, post-influenzal and otherwise.

Dr. Ryerson reviews interestingly the more recent literature on the Albee and Hibbs methods of autograft treatment of Pott's disease, heliotherapy as relates to bone tuberculosis especially, and many of the lessons learned during the war concerning the handling of infected and non-infected injuries to the joints.

NEW AND NONOFFICIAL REMEDIES, 1922. Containing descriptions of the Articles Which Stand Accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1922. Cloth. Price, \$1.50. Pp. 453. Chicago: American Medical Association, 1922.

This is the official yearly publication of the Council on Pharmacy and Chemistry. In it the Council presents to the medical profession impartial, critical information concerning those proprietary medicines which the Council deems worthy of recognition. The book also contains descriptions of those nonofficial remedies rated by the Council as worthy of consideration by the profession.

Before a product is admitted to New and Nonofficial Remedies, these important requirements are stipulated: (1) a declaration of the quantitative composition of the article; (2) truthful therapeutic claims in marketing the article; (3) evident or potential therapeutic value.

As evidence of the disinterested character of the work, the descriptions of the preparations are based not only on the information submitted by the manufacturer or his agents, but also on investigations made by, or under the direction of, the Council. The statements made by the manufacturer or those interested in the marketing of the article are culled, and only those are accepted that are supported by substantiating evidence or conform to generally accepted facts. For the best interests of both the profession and the patients, physicians will safeguard all concerned by giving no consideration to a proprietary medicinal agent that has not been admitted to New and Nonofficial Remedies.

A feature that enhances the practical value of the book is the general discussion that introduces each group. For instance, the silver, the iodine, the arsenic and the animal organ preparations and the biologic products are each preceded by a general and thorough discussion of the group. These articles compare the value of the products included in the group with similar pharmacopeial and other established drugs which it is proposed that these proprietary preparations shall supplant.

Each year's edition of New and Nonofficial Remedies is so effectively revised as to be essentially a newly written book.

Physicians wishing to know why a given proprietary preparation is not described in New and Nonofficial Remedies will find at the end of the book "References to Proprietary and Unofficial Articles Not Described in N. N. R." In this chapter are given references to the published articles dealing with preparations that have not been accepted. These reports include references to the Reports of the Council, to reports of the American Medical Association Chemical Laboratory, and to articles that have appeared in THE JOURNAL.

New and Nonofficial Remedies should be in the hands of all physicians who prescribe drugs. The book contains authoritative information about the newer materia medica which cannot be found in any other publication.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XVI

FEBRUARY 15, 1923

NUMBER 2

ORIGINAL ARTICLES

THE DIFFERENTIAL DIAGNOSIS OF MENINGITIS*

C. F. NEU, M.D.
INDIANAPOLIS

The diagnosis of meningitis is determined primarily by the consideration of: (1) The history of a probable cause. (2) Symptoms indicative of the involvement of the surface of the brain, or the various nerve roots by the pathological processes that take place. (3) The manner of development of those symptoms. (4) General symptoms resulting from the existence of an infectious process and the accompanying absorption and circulation of toxins produced therefrom throughout the body. (5) Changes to be found in the character and composition of the cerebro-spinal fluid.

The importance and necessity of ascertaining full and accurate information as to a probable cause is so manifest that it requires no further comment.

The symptoms met with in the various forms of meningitis will vary a great deal according to the acuteness and chronicity of the disease process, according to the virulence of the specific cause, and according to the particular constitutional makeup of the individual affected. Through them all, however, there are found certain symptoms more or less in common, while each particular variety may have other symptoms which are more or less characteristic of that particular type.

Headache is probably the most constant and, if not the most prominent, is one of the most prominent symptoms present. While more or less continuous, it is subject to marked exacerbations and remissions in rapid succession, tending to be worse at night, and accompanying rises of temperature. It is usually referred to the occipital, frontal or temporal regions, but may be general in its distribution. At times it is severe and agonizing, leading the patient to cry out and to grasp the head in the hands. It persists until the perception of it is abolished by unconsciousness or the development of stupor

or coma or beginning subsidence of the inflammatory process in cases recovering. In simple meningitis, and in secondary purulent meningitis of septicemia, there may be no pain. When headache and delirium are the result of a general disease, the headache usually ceases when the delirium begins, but in meningitis it is said to be continuous and co-existent with the delirium.

Vomiting is also an early and frequent symptom, is not accompanied by much nausea or retching and is cerebral or projectile in character. In children it often occurs without apparent cause or on slight indiscretion of diet.

Vertigo is scarcely ever absent, at least during the early days of the disease, and when coming up during convalescence should lead one to suspect ear complications.

Delirium is absent only in the mild cases. When present it usually appears early and its character is modified by the predisposition and habits of the patient. It may be low and muttering or active and violent, and usually persists until unconsciousness sets in, or with subsidence of the inflammatory process.

Cervical rigidity is frequently the first and only unquestionable physical sign of an existing meningitis, often appearing as early as the second day. Accompanying it, there is often a corresponding stiffness of the back, retraction of the head, tendency to opisthotonus and acute complaint of pain on attempted movement, and particularly on flexion of leg upon the abdomen.

Convulsive seizures may occur without any relationship to the primary seat of the trouble. They may resemble the general type of convulsions seen in epilepsy. Sometimes they are said to be about the only meningeal symptom produced by septic processes.

General hyperesthesia may be a very prominent symptom as indicated by the fear of being touched or moved and by the crying and moaning on movement.

The special senses also are very frequently involved, especially vision and hearing, as indicated by the acute reaction to light and to sound producing photophobia and painful effects from ordinary noises and sounds.

*First paper of a Symposium on Meningitis presented before the Indiana State Medical Association at the Muncie session, September, 1922.

Optic neuritis is a common symptom in basilar meningitis, but is seldom seen until the second week or after. Rarely is this severe enough to become hemorrhagic in character. The auditory nerve, probably because of its anatomical relationship, is not infrequently so severely involved as to destroy its function, resulting in complete deafness.

Chills and fever, although not invariably present, are also very common. Chills usually only occur at the onset, but when the meningitis is secondary to some focal suppurative process, they may occur during the course of the disease.

The temperature curve is variable. There is nothing characteristic in its course. Many cases show an early rise and remain so throughout, while others show an initial rise followed by a fall sometimes to subnormal, only to be followed by a terminal rise. A sudden rise and fall of temperature during the course of the disease usually presages an unfavorable outcome.

The pulse and respiratory alterations are not characteristic and are more or less dependent upon general and intracranial conditions.

Herpes of the lips is found in most cases and occurs rather early, at times as early as the third day. The vaso-motor system shows considerable instability, slight irritation of the skin, being followed by a rather violent reaction resulting in so-called "tache cerebrale".

Trophic changes are not infrequent as shown by the tendency to the formation of sloughs, bedsores and other cutaneous changes. Various cutaneous eruptions frequently are seen, sometimes appearing as early as the third day. The most common is probably petechial in appearance and diffuse in distribution, often assuming a purplish color in spots. Sometimes the eruption is pemphigoid, hemorrhagic or gangrenous in nature.

Arthritic disturbances are also met with, particularly in the so-called septic forms of meningitis, resembling in every way rheumatic conditions.

The gastro-intestinal disturbances, apart from the peculiarity of the vomiting, are such as usually arise in other septic conditions, as loss of appetite, obstinate constipation, or, less frequently, diarrhea, etc.

The urine usually shows the character of a febrile or septic condition, often containing considerable albumin and the various forms of casts found in other acute conditions. The blood picture usually shows the changes found in septic or inflammatory processes generally.

Local symptoms may be of an irritative or paralytic nature; the former usually appearing in the earlier stages, and the paralytic in the later stages of the illness. Muscular twitchings and spasms frequently occur. Nystagmus or strabismus are common manifestations. Pupillary disturbances are frequent. There may be

dilatation, fixation, inequality or irregularity. One or more of the cranial nerves are nearly always involved. The special sense nerves have already been mentioned. The external ocular nerves are probably most frequently involved, but the facial, fifth, glosso-pharyngeal, pneumogastric and hypoglossal are also at times affected. The extremities are also at times involved in the irritative and paralytic phenomena, resulting in muscular spasms or contractures on the one hand or mono or multiplegia on the other. The superficial reflexes are usually exaggerated in the early stages, disappearing with the increasing coma or with the appearance of paralysis. The tendon reflexes as a rule are not altered except where definite paralyzes occur, when the Babinski toe phenomenon may be present. Loss of sphincter control is usually dependent upon the degree of the delirium or coma.

The spinal fluid, almost without exception, undergoes some changes in its character and composition during an attack of meningitis. These changes will, to a great extent, depend upon the type of specific causative agent, the virulence of its action, and the degree of damage undergone by the meninges. Changes in transparency and consistency, modifications of pressure, of coagulability, sugar, globulin, cellular and bacterial content are practically always found.

While this symptomatology applies more particularly to the acute forms of the disease, yet it applies in a general way to the chronic forms also, the modifications depending upon the lessened activity of the invading causative agent and the slower and less active tissue changes.

With this array of changes, it would seem that there should not be any difficulty in the diagnosis of meningitis, and fortunately in the majority of cases, there is none. But it is just the exceptional conditions that cause the most difficulty. It must be borne in mind that there is no symptom in meningitis that is not sometimes absent, and it is also true that an extensive purulent meningitis may run its course without manifesting symptoms indicative of a meningeal involvement. The early recognition of an existing meningitis is of the utmost importance, not only in regard to prophylaxis and treatment, but also in regard to prognosis. It is just in the early stages that the difficulty of diagnosis arises. After the disease condition is once definitely established, the symptoms are as a rule so characteristic and pronounced that the diagnosis is comparatively easy. So many patients at the onset of any very acute illness, particularly when infectious in nature, are apt to manifest many of the symptoms met with in the onset of meningitis. Headache, nausea, vomiting, general pains, constipation, rise of temperature, nervousness, somnolence and even convulsive manifestations are not an unusual

occurrence. One can usually form some provisional conclusion by a consideration of the anamnesis and of general conditions, but an examination of the cerebro-spinal fluid will often be necessary for a definite diagnosis. These same factors and conditions also enable one in the great majority of cases to determine the specific form of meningitis.

Of acute general conditions, typhoid fever is probably one of the most common that must be differentiated from meningitis, but the rather characteristic temperature curve, the abdominal tympany, the peculiar stools, the presence of the Widal reaction, the leucopenia, the presence of typhoid bacilli in the blood and stools, the tendency for the headache to disappear with the appearance of the delirium; the lesser degree of irritability, the normal condition of the cerebro-spinal fluid should serve to establish a definite diagnosis.

Uremia not infrequently is accompanied by cerebral manifestations somewhat indicative of meningitis, but the general appearance of the patient, the urinous odor, the condition of the pulse and urine, the absence of fever, of cervical rigidity, of general hypersensitiveness and of changes in the character and composition of the cerebro-spinal fluid would exclude meningitis.

Pneumonia, the acute exanthemata, and some acute gastro-intestinal conditions, especially in children, not infrequently manifest a symptom-complex closely resembling meningitis in its early stages, but the more sudden rise and higher degrees of temperature, the greater severity and more distressing character of the vomiting with the absence of a projective nature, the presence of associated physical conditions related to the various groups mentioned, the absence of cervical rigidity, of changes in the cerebro-spinal fluid and of cranial nerve involvement should enable one to exclude a possible meningitis. But it is in just such conditions that meningitis not infrequently develops as a complication, hence it must be borne in mind of the possibility that we may be dealing with both diseased conditions.

Acute encephalitis, particularly the so-called epidemic type, is not infrequently accompanied by symptoms indicative of meningeal irritation, and sometimes of such severity as to warrant the assumption of an existing meningitis, but upon examination of the cerebro-spinal fluid, one finds very slight or no changes in comparison to the severity of the clinical manifestations. The cerebro-spinal fluid may or may not be increased. The globulin, when increased, is as a rule only slightly so, but occasionally is strongly positive. In some the cell count is normal. In most cases the increase is small, usually from 10 to 100, and is of the mononuclear type. In a few cases there is a high cell count. The fluid does not form in a coagulum on standing,

and has been so reported in practically every case thus far.

Acute polio-encephalitis may at first be impossible to differentiate from meningitis, but the appearance rather early of a flaccid paralysis, with a relatively clear spinal fluid with slight increase in cell content, and a diffused crumbling clot, suggests poliomyelitis.

Vascular lesions of the brain; hemorrhage, embolism or thrombosis, sometimes cause difficulty, but the absence of fever, the rapidity of the course, the absence of cervical rigidity, the presence of general related conditions and a normal cerebro-spinal fluid, except sometimes the presence of blood in meningeal or ventricular hemorrhage, would be against a meningitis.

Acute sinus infection may cause difficulty, but the history of a local cause, the characteristic chills and fever, the normal cerebro-spinal fluid, help to exclude a possible meningitis.

Hysteria and acute psychogenic deliria at times cause difficulty in diagnosis from meningitis. The presence of febrile conditions, of focal symptoms, like strabismus, unequal pupils, ophthalmic changes and of changes in the cerebro-spinal fluid, would point to an organic disease. In many cases examination of the cerebro-spinal fluid seems to be the only certain means of making a positive diagnosis.

Brain tumor and abscess may have to be differentiated from chronic meningitis, particularly the tuberculous and syphilitic forms. In tumor the absence of any febrile symptoms, the relatively early symptoms of paralysis, the absence of irritative meningeal phenomena, and of abnormal conditions of the cerebro-spinal fluid will be suggestive. In tuberculous meningitis there is usually found the presence of tuberculosis elsewhere as well as positive tuberculosis reactions. In syphilitic meningitis there is found present positive Wassermann and gold sol reactions.

In abscess the onset of symptoms is slower, as is also their progress. The headache is not associated with hyperesthesia of light, sound and general sensation. The temperature tends to be intermittent, sometimes being subnormal. There is a history of focal infection and the cerebro-spinal fluid is normal.

Numerous other conditions might be mentioned, such as middle ear disease, influenza, pellagra, rabies and so forth, where the symptoms complained of suggest the possibility of a meningitis, but in all of these an examination of the cerebro-spinal fluid will disclose whether or not there is present any involvement of the meninges.

In conclusion, I merely want to call attention to the importance and necessity of an examination of the cerebro-spinal fluid in all cases where the question of a possible diagnosis of meningitis is in doubt. The relative ease with which

lumbar puncture can be performed, as a rule, the improbability of any harm being done or of being followed by any serious after effects, if properly and judiciously carried out, and the information to be gathered from such an examination is such that every practicing physician should prepare himself to enable him to make use of it.

TREATMENT OF MENINGITIS*

MILES F. PORTER, JR., M.D.

FORT WAYNE

Were it not for the sake of completeness, a paper on this subject should not be dignified by a place on our program. There are few subjects upon which there is so little diversity of opinion, and not many better understood. Except for a few minor points which I hope to emphasize, I shall have to content myself with a brief statement of the recognized procedure in handling this disease.

So far as therapy is concerned, meningitis falls into three classes—"epidemic", "suppurative" and "tubercular".

With the exception of diphtheria, no disease has furnished more brilliant proof of the efficacy of specific serum therapy than has cerebro-spinal meningitis. By the employment of Flexner's serum its mortality rate has been reduced from 80 percent to 20 percent or less, and its sequellæ proportionately lessened. Its tremendous value in the latter role will not be underestimated by anyone who has witnessed such end results of cerebro-spinal infection as hydrocephalus, idiocy, paralysis, blindness, deafness, etc. However, an infectious disease susceptible of treatment with a specific antitoxic serum can scarcely be said to be satisfactorily managed and still be responsible for as high a death rate as fifteen or twenty percent. Accepting as incontrovertible that Flexner's serum is a positive bacteriolytic agent for meningococci, why 15 or 20 percent of failures? Several causes must be considered. Several strains of meningococci undoubtedly occur, and unless we retreat from our present-day conviction concerning the specificity of the products of immunization, it is evident that the strain present in a given case may not be represented in the serum used. Again, there may be unusually virulent strains against which the serum is impotent.

It is my conviction, however, that the present death rate is from two to three times too high because of delay in diagnosis and hence in the administration of the serum, because of the employment of too small doses at too great intervals, and because of improperly standardized sera.

Outside of increased diagnostic acumen the only remedy for delay in diagnosis and the

beginning of treatment lies in the more frequent employment of lumbar puncture and the introduction of serum at the time the diagnostic puncture is made in every suspicious case. Lumbar puncture is not difficult nor dangerous and need not be painful.

The majority of cases present definite evidence of cerebro-spinal infection in the spinal fluid before the cardinal clinical manifestations are made clear. It follows that puncture should be utilized as an investigative rather than corroborative procedure. The immediate introduction of antimeningococcic serum should follow the withdrawal of every turbid fluid. It can do no harm even when subsequent bacteriological study reveals an infective agent other than the meningococcus. As in the use of diphtheria antitoxin an attempt should be made to get all the serum needed into the patient in the shortest possible time. The first dose should be from thirty to sixty cc., depending upon the age and size of the patient, the amount of fluid previously withdrawn and the resistance to the gravity flow of the serum. Before the serum is introduced the spinal fluid should be allowed to flow until it stops or until three ounces have been withdrawn, and nothing but the pressure of gravity used in the subsequent introduction of the serum except in those cases where practically no fluid can be withdrawn, and then extreme caution should be used in the force exerted behind the serum. A second and a third dose should be given at twelve-hour intervals and then discontinued for twenty-four hours at least. One hundred cc. of serum used in the first three doses will render further treatment unnecessary in the vast majority of cases diagnosed early.

Unnecessary prolongation of intraspinal therapy may and frequently does prolong the symptoms, such as headaches, rigidity of the neck, fever, etc., and still more importantly does increase the risk of distressing sequellæ due to caudal myelitis and nerve root injury.

Another important consideration in determining the best method of treatment is based upon the emphasis recently placed upon the fact that this disease is a generalized systemic infection with localized meningeal manifestations. That being the case the bacteriolytic attack must not be confined to the cerebro-spinal system alone. As soon as the diagnosis is established 100 cc. of serum should be given—intravenously when practicable and subcutaneously in infants. This rarely needs to be repeated if intraspinal therapy as outlined above is employed, but it becomes the procedure of choice in cases where subsidence of infection doesn't promptly follow the first three intraspinal injections, and in all protracted and intractable cases. I have had the opportunity of seeing several such cases clear up almost immediately upon the discontinuance of intraspinal therapy

*Second paper of a Symposium on Meningitis presented before the Indiana State Medical Association at the Muncie session, September, 1922.

and its replacement with its intravenous use. In a year's experience in a base hospital during which time nineteen cases of meningitis were treated by this method just one death occurred, and while I am fully aware of the beneficent, ameliorating influence of the Almighty in matters of this kind, I am unwilling to grant that medical science was wholly without influence.

The intraventricular introduction of the serum has been advised as a routine procedure in infants in whom the fontanelle is still open, but this is unnecessary I believe except in subarachnoid block. It is obvious that to be effective the serum introduced by lumbar puncture must reach all the infected area and subarachnoid block would make this impossible. Ordinarily block may be suspected if spinal fluid is not obtained by lumbar puncture, but it can more certainly be diagnosed by intraventricular injection of phenolsulphonphthalein and subsequent lumbar puncture. Similarly in hydrocephalus resulting from such block, distinction between the communicating and obstructive types can be made by injecting phthalein in the ventricles, and subsequently into the canal—slow absorption of the phthalein from the latter indicating a communicating hydrocephalus. In either of these conditions the intraventricular injection of serum is advisable only if the fontanelle is open. In older children and adults cistern puncture offers the simpler and probably the better approach. It is from adhesions in this region that communicating hydrocephalus develops and it is probable also that the internal type may be caused by the spread of exudate and adhesions from the cisterna into the foramina rather than from the ventricles. In my opinion trephining in order to inject the serum into the ventricles should rarely if ever be resorted to.

The criteria of cure, *i. e.*, the indications for discontinuing the use of serum, in the order of their importance are:

- (a) The subsidence of clinical symptoms.
- (b) Diminution of meningococci in sedimented fluid.
- (c) Diminution in cell count of fluid removed sufficiently long after intraspinal injection of serum not to be influenced thereby. Obviously no arbitrary rules can be set down to govern this point with exactitude. In a word, early intensive use of serum rarely results in the necessity of further therapy and a delay of a few hours and study of another specimen of fluid often shows further treatment unnecessary.

Tubercular meningitis unfortunately can be dismissed in a word so far as treatment is concerned. Frequent drainage of the spinal fluid, coupled with such medicaments as are indicated for the relief of symptoms, exhausts our armamentarium—and with all but hopeless results. Reasonably authentic cases have recovered, however.

Suppurative meningitis is almost as universally fatal. The etiological organisms are varied—streptococci, pneumococci and staphylococci being the most common offenders. It is obviously impossible to compare their treatment separately, but in general it may be said that it is always advisable to remove such primary foci as are surgically accessible. A number of cases of meningitis followed by mastoid infection have been cured by mastoidectomy. Further than this, I believe they should all be given the benefit of such biological therapy as is indicated. I have seen a case of streptococcus and another of pneumococcus meningitis cured if not by, at least during, the intravenous and intraspinal use of appropriate antisera. In the low grade, more or less subacute cases vaccines may logically be employed, however remote the hope they may engender. Frequent lumbar puncture is a palliative influence in all these cases—and as Quinke showed in the days preceding the use of serum in the epidemic form, may materially affect the infectious process.

In conclusion let me repeat:

1. That a lower mortality rate will result from (a) early diagnosis through early lumbar puncture; (b) early use of larger doses of serum given both intravenously and intraspinally, the latter at short intervals.
2. That the exhibition of antimeningococcic serum may be too long continued.
3. That suppurative meningitis, particularly pneumococcic, offers enough hope of cure to warrant the attempt.

OTITIC MENINGITIS*

HARRY BOYD-SNEE, M.D.

SOUTH BEND

What I have to contribute on meningitis will deal with the type which originates from a primary suppurative focal infection located in the temporal bone, and my discussion is concerned more particularly with the etiological factors that are active in determining the complication which manifests itself as acute suppurative meningitis as it has been observed to develop in connection with insults to the integrity of the structures found in the temporal bone.

A clearer understanding of the manner in which otitic meningitis develops may be obtained if I review briefly some of the anatomical peculiarities of the temporal bone. Let me point out that the middle ear tract is laid down early in fetal life; in the sixth month it can be identified as an anatomical entity and at birth the bony bounding walls of the tract are complete and are formed by fusion and folding of the apposed *pars squama* and *pars petrosa*. The tract comprises the eustachian canal, the tympanic cavity and the antrum; it is covered by a

*Third paper of Symposium on Meningitis presented before the Indiana State Medical Association at the Muncie session, September, 1922.

mucous membrane lining that is uninterrupted and continuous from the naso-pharyngeal opening of the eustachian tube to the posterior wall of the antrum and this lining membrane we find functions as a periosteum to the bony walls. Intracranially the outer layer of the dura is applied to the inner bony plates of the squama and petrosa and it likewise functions as a periosteum to those structures. The vessels from the dura as well as those from the lining mucous membrane permeate the intervening cancellous bony structure and anastomose freely in the situation of the pneumatic and medullary spaces.

The bony capsule of the labyrinth and the inner bony wall of the tympanic cavity communicate directly through the fenestra ovalis and the fenestra rotunda. The oval window is closed by the footplate of the stapes which is fixed to its margins by the annular ligament. The mastoid process is developed from the mastoid plate an embryonal structure; this occurs after birth, beginning about the first year, and it is complete about the fourth year. I wish to emphasize that the petrosal and zygomatic cells are developed in connection with the evolution of the squama and petrosa and that they are definite anatomical structures at birth and are not concerned with the mastoid plate.

In fetal life the petro-squamosal sinus is found passing along the roof of the antrum and tympanic cavity in the course of the petro-squamosal suture to emerge at an opening in front of the external meatus; in infant bones it has been observed to groove and sometimes to canalize the bone in its course through the suture, lying partly overlapped by the tegmen. It receives veins from the middle ear tract and also veins from the meninges and the adjacent temporo-sphenoidal lobe above.

Acute suppurative otitic meningitis is a consequence of an invasion by pyogenic micro-organisms of the subarachnoid space in the meninges. It may proceed directly from the blood stream in the course of an acute general infectious disease like pneumonia, measles and scarlatina occurring concurrently with an acute suppurative otitis or an acute exacerbation of a chronic suppurative otitis. However, it is more often observed as a complication arising from an adjacent suppuration by direct extension of the infectious process, and it may originate from a cerebral or a cerebellar abscess, from an infective sinus thrombosis, from an extradural abscess or from a suppurative labyrinthitis.

What concerns us mostly in this discussion is the etiology of this type of meningitis, therefore we will utilize the time remaining to consider the factors which have been found contributing to, as well as those which appear to determine, suppurative otitic meningitis.

Violence may produce a fracture of the skull; if the fracture involved the bony labyrinthine

capsule there would be danger of secondary infection establishing itself in the membranous labyrinth and in that event direct extension to the piarachnoid structures is possible through the internal auditory meatus or by way of the aqueductus vestibuli and the saccus endolymphaticus. However, far greater danger obtains if the fracture involves any part of the temporal bone harboring a suppuration and extends into the inner plate, which is the case whenever the accident befalls an individual suffering with an acute or a chronic suppurative otitis. Of course, an operative injury to the dura may lead directly to a meningitis and in the same connection operative injury to the stapes involving the footplate may open a pathway to the meninges through the labyrinth. This is especially true if the operator is working in an infected field.

We will next consider how the inner plate of the bone may suffer from the presence of infective micro-organisms as they are found in connection with the various acute and chronic suppurations in the temporal bone. The immediate effect on the tissues invaded by these organisms is characterized by the development of an inflammatory reaction involving primarily the vascular structures of the bone and the mucous membrane lining of the middle ear tract. The dura as well as the periosteum may participate in the initial reaction; only rarely has this been observed clinically, and in that event external pachymeningitis and periostitis are concurrent with the otitis and originate from a blood stream infection. Sooner or later the bone itself becomes involved, osteitis supervening, and through erosion of the inner plate the intracranial structures are brought in contact with the area of suppuration and the following complications have been observed to develop secondarily in connection with the otitic suppuration and intercurrently in connection with the meningitis. An extradural abscess may proceed directly to the meninges as an internal pachymeningitis. Perisinusitis may precipitate a purulent sinus thrombosis by extension through the sinus wall and this septic thrombus infect in its turn the posterior sinus wall, causing an inflammation that spreads to the meninges. A subcortical brain abscess may reach the meninges as a progressive encephalitis extending to the surface through the cortex or it may proceed in the direction of the ventricle and precipitate a ventricular meningitis, or a brain abscess may rupture directly into the ventricles. Erosion of the bony labyrinthine capsule may occur and determine a suppurative labyrinthitis that may lead directly to a meningitis.

There is still another factor that contributes to injury of the inner plate through bone destruction, namely, cholesteatoma as it is found developing in connection with chronic suppurative otitis. The cholesteatoma by pressure necrosis may produce a defect in the inner plate.

If it occurs subtentorial and into the posterior cranial fossa the infection may proceed through that pathway to the cerebellum, pons and the medulla, or it may happen in the situation of the tegmen antri or tegmen tympani and open a path to the meninges in the middle fossa. In the same manner it may establish a direct path to the basal meninges by destroying the outer walls of the semi-circular canals and the vestibule.

The anatomical status of the petro-squamosal sinus must not be overlooked in this discussion for it is obviously a factor which should receive consideration in any case of acute suppurative otitis developing in an infant or during early childhood, for the reason that a temporo-sphenoidal abscess may arise directly from it if it is involved in a suppuration; likewise septic thrombosis may proceed by this pathway to the lateral sinus; either of which conditions may lead to a suppurative meningitis. Incomplete closure of the petro-squamosal suture establishes through the dehiscence a pathway through the middle fossa to the meninges.

A variety of pyogenic organisms have been identified as the causative agents of this type of suppurative meningitis. If the meningitis supervened as a secondary complication in connection with a chronic suppurative middle ear disease a mixed infection has usually been found in the tympanic exudate and a monobacterial culture obtained from the spinal fluid and also from the meningeal exudate recovered at operation or in autopsy, and the streptococcus has been the organism mostly found. On the other hand, whenever the meningitis developed in the course of an acute otitis the organisms identified in the different exudates, namely, tympanic, spinal fluid, operative meningeal and post mortem meningeal, were nearly always found to be monobacterial and identical in all the specimens. The organisms recovered were identified most frequently as streptococcus, less often the pneumococcus and the staphylococcus were found, and exceptionally the bacillus influenzae and bacillus pyocyaneus.

DISCUSSION

DR. ROBERT M. MOORE (Indianapolis): The paper which Doctor Neu presented seems to revolve itself around the importance of lumbar puncture—that after all of our clinical studies have been completed we finally determine the true condition by careful examination of the spinal fluid. Pratt states that a differential diagnosis can be made in 90 percent of all forms of meningitis by a careful study of the spinal fluid. In the past lumbar puncture has been thought of as a very dangerous procedure, and I do not want to give the impression that it is entirely simple, but I agree with Doctor Neu that the surgical technique of lumbar puncture can be done by any physician who has observed

it a few times, first on a cadaver and then on a patient.

Doctor Neu did not mention something that is important to many of us—the after-effects of a puncture. The thing which should be impressed upon the individual is absolute rest for at least twenty-four hours after removing the amount of fluid necessary for a diagnosis. Quite often the patient has an intense headache and is very restless—may or may not have a slight elevation in temperature. It is well to elevate the feet and put ice caps on the head. Perhaps the best drug to relieve the headache is salicylates with the addition of codein. One must always keep in mind meningeal symptoms that are associated with certain blood conditions such as pernicious anemia.

Speaking of otitic meningitis, the important point is prevention. Many of us are careless in the early recognition of conditions that contribute to this serious disease. We do not train ourselves to examine the ear intelligently and observe early redness and disturbances of light reflex and other conditions which indicate early drainage. I think the ear drum should be opened when these conditions are found, and by a man who is qualified to do it.

Another important thing is the chronic discharging ear. A number of these people would consult their ear doctor and have an operation, which would prevent the possibility of suppurative meningitis, if their true condition was explained to them. I believe that all discharging ears, if the patient lives long enough, will invariably result in a meningitis.

Another important consideration is the submucous operation from which a meningitis may develop—usually fatal. I think pre-operative treatment in these patients cannot be stressed too much. If they are properly prepared and provision made to establish adequate drainage, a fatal outcome would often be prevented.

As to treatment, early and intensive treatment is the thing that cuts down the mortality in the epidemic type. We have had men report wonderful results in tuberculous meningitis—results that have been questioned. It has been my experience that after the diagnosis is confirmed the patient usually dies. In suppurative meningitis thorough drainage and supportive treatment give us the best results.

DR. D. C. KEARBY (Indianapolis): Differential diagnosis and treatment of otitic meningitis is very similar to meningitis due to other causes. Acute suppurative conditions about the middle ear and its adjacent cavities are the most common cause of acute suppurative conditions of the brain and meninges; next in order are the infections and suppurations about the nose and nasal accessory sinuses. Fractures of the skull, especially about the base and usually through

the temporal bone would come next, and suppurative foci in other parts of the body, especially the lungs, would be last. Therefore, in any given case of otitic origin or nasal accessory sinus disease the otologist and rhinologist always keeps in mind the possibility of brain and meningeal involvement, and for classification into entities we divide them into the conditions found upon operation or at autopsy. They do not always exist as a simple entity, but more than one may prevail in a given case.

First, Epidural Abscess: The most common and least serious; rarely diagnosed except by the surgeon when following leads into diseased bone while operating the original focus of infection. Headache is the common symptom, but nearly always confounded with and thought of as a part of the original disease. Spinal fluid remains normal.

Treatment consists of surgical removal of all diseased bone about mastoid or accessory sinus until normal dura appears around the area of granulation.

Second, Subdural Abscess: This is usually an extension of the former, either by direct perforation of the dura or by metastasis through blood and lymph channels. There are no typical symptoms. When it has reached sufficient size to exert pressure upon motor or sensory areas in the cortex or upon some of the cranial nerves at the base, focal symptoms will appear. Spinal fluid will then be under pressure.

The treatment is to incise the dura, and drain.

Third, Acute Serous Meningitis: More than likely a transitional stage of purulent type. Symptoms about the same as purulent and differentiated by spinal fluid study. There will be increase in amount and pressure; otherwise normal.

Treatment—Repeated lumbar punctures. Sometimes one is sufficient.

Fourth, Acute Purulent Meningitis: The most common cause is otitis media. Differentiated by spinal fluid study. The picture is reversed—increase in amount and pressure; turbid, acid in reaction, and increased cell count. Specific bacteria may be present.

Treatment—The most effective and rational is removal of the original focus of infection. If from the mastoid, do a simple or radical mastoidectomy. If from an accessory sinus, open and drain.

Otitic meningitis is of two types—the fulminating type, where meningitis develops suddenly, forces its way quickly, and terminates fatally in a short time. Little hope can be offered in this swift-moving, virulent type. Then there is the intermittent type. This silent, slow, treacherous type progresses without appreciable symptoms until the disease is advanced, then a sudden explosion occurs and the patient becomes unconscious. Surgery of the original focus of

infection is the most successful method of treatment. Treatment by serum depends upon the bacteriology of the case. It may be due to the meningococcus, streptococcus, or pneumococcus—or tuberculosis, etc. Pneumococcus is the worst and treatment is practically useless. Meningococcic meningitis yields to serum treatment, while streptococcic meningitis does not respond to serum treatment very readily.

DR. C. NORMAN HOWARD (Warsaw): There is one point I would like to bring out in regard to suppurative meningitis—the situation in which, no matter where the fire originated, you have a raging conflagration inside of the skull. The question is, is there anything whatever that will cure the patient? To illustrate: I was called in consultation some time ago with a family physician, who is alert and practical, to see a patient, a boy, who had gone in swimming, shortly after which there had been a rapid spread of infection up to the frontal sinus and into the brain. At the time of the consultation we had this picture: Temperature 104 degrees; rigidity of the neck; some involuntary passing of feces and urine; spinal puncture showed cloudiness; no meningococci. The infection had started in the nose, gone up to the frontal sinus, and swept on into the brain. What should we do? There were three or four of us interested, and the point was whether we should operate on the frontal sinus. We did not operate. While it is my work to operate, I thought we should not do so in conditions like this. I should like the essayist in closing to say whether or not he thinks I was wrong. If there is a chance for the patient by operating, of course we operate; but are we justified in doing so when we have a picture of this kind and we know the patient will die? I have never yet seen a patient in that condition who lived, no matter what was done. If anyone else has, I would like to know it. I am putting this as a practical question.

DR. C. H. McCASKEY (Indianapolis): I was present when this program was prepared, and it occurred to the Program Committee that we had not had a symposium like this for a long time. One thing that led us to arrange for it was the number of cases of meningitis which the otologist sees. We thought if we could stimulate the men of this Association to the early recognition of meningitis, perhaps we might have more cases which could be classified as recoveries—in other words, stimulate the men to the early recognition of the foci of infection which cause meningitis.

Doctor Moore spoke of our particular phase of the work—early recognition of acute middle ear conditions. This would oftentimes prevent a case of meningitis.

So if we do nothing more by this symposium than to stimulate the men to recognize these

early foci of infection, we shall have accomplished a great deal.

DR. CHARLES G. BEALL (Fort Wayne): I think this subject belongs almost entirely to the medical man. When we have a suppurative meningitis, no matter what it is from, we should have the benefit of the advice of a medical man.

If we have a patient who has a rather sudden pain in his belly, the first thing that enters our mind is peritonitis, and it will be in our mind until we can exclude it. If we have an individual who has a rather sudden onset of headache, the first thing that should come to our mind is meningitis. If, in addition to this headache, he has any other clinical signs of meningeal irritation, spinal puncture should be done. A spinal puncture after it is done once or twice is easy in a vast majority of cases, except in fat individuals. It is easy to do a spinal puncture on a cadaver, and doing it a few times on a cadaver gives one confidence to do it on patients. I think every practitioner should be able to do a spinal puncture. Why? Because it is the early diagnosis of meningitis that will give us better results. Statistics show that no matter what treatment has been, whether it is a combination of intraspinal and intravenous therapy, or either alone, if the case is started on the treatment within the first twenty-four hours, only 16 percent will die. If the start is made after the first twenty-four hours the percentage of mortality rises in geometrical progression.

I believe the meningitis that starts in the frontal sinus or in the ear should have the focus of infection taken out. I think the original focus should be eradicated if possible, and I say this in spite of the fact that the only case of proven streptococcic meningitis that I ever saw that got well was a boy whose parents refused an operation.

DR. CHARLES A. SELLERS (Hartford City): I had under my observation not long ago a case of meningitis in which the only symptom complained of by the patient was lumbar pain. He gave no history of an initial sore, but did have a strongly positive blood Wassermann, which Wassermann was confirmed by Dr. Herbert Buckles. When he first came under my care I thought he might have a typhoid fever because of a constant afternoon rise of temperature. His Widal was negative. He died in seven days from some acute meningeal disease and these meningeal symptoms were of about 36 hours' duration.

I bring up the symptom of backache to emphasize some of the early signs and symptoms of meningitis.

DR. CHARLES F. NEU (closing): I simply want to emphasize one point to which Doctor Porter referred, and that is the advisability of using the serum treatment at the time you make your primary lumbar puncture for diagnostic

purposes. If you have no history of focal infection the injection of antimeningitic serum will be indicated to some extent, and if it should prove to be the epidemic form of meningitis it will be life saving. If you wait until the fluid is examined—it takes some hours to make a culture—valuable time will be lost. My experience has been that the injection of serum at the time of examination rarely if ever does any harm.

I also wish to emphasize a point brought out in connection with otitic meningitis, and that is the seriousness of so-called secondary suppurative meningitis. Frankly speaking, I have rarely if ever seen such a case recover. This indicates the absolute necessity of prevention so far as the disease suppurative meningitis is concerned. We should watch the focal infections from the nose, the ears, the eyes, recognizing the seriousness of meningitis developing from these sources—that it is practically hopeless from either a medical or surgical standpoint. This should impress upon us the necessity for prevention of any focal infection we may have to take care of there.

In regard to treatment of the condition described by Doctor Howard, I would say that my own feeling is that it is a difficult point to answer. The question is, would you do it if it were your own child and you knew that leaving it alone was absolutely hopeless? I think ninety-five out of a hundred would take a chance.

DR. MILES F. PORTER, JR. (closing): In regard to diagnostic lumbar puncture, I feel that diagnostic dry taps are a good deal like bass fishing—you cannot catch them where they ain't.

As to treatment, I think the commonest error is too much time between the injections of antimeningitic serum. In 23 consecutive cases with but one death we have never had to give over 200 cc., including 100 cc. intravenously; but you will find it commonly reported in the statistics as 300 to 500 cc. to a patient. I believe most of them are over-treated and the spinal irritation kept up.

Suppurative meningitis, in my opinion, is not so hopeless as is commonly believed. I had a case produced by the Smith-Ellis technique which infected the man. During the use of intraspinal therapy he recovered.

As to Doctor Howard's question, where it is a hopeless case the patient will not be more certain to die after operation than if you leave him alone. A Dutch otologist reported ten years ago six recoveries after bacteria were found in the spinal fluid. I know of two such cases in Fort Wayne. Certainly one chance in a hundred is worth taking.

In regard to intraspinal treatment, gravity is all that is ever necessary, practically speaking, and it is unwise to resort to force to inject serum. If the subarachnoid space is drained

you can get tremendous quantities out without any evidence of hydrocephalus. Taking out a large quantity permits you to force in a large amount of serum. I have given 75 cc. of serum without any ill effects.

I do not know of anything of more universal value in a doctor's bag than a puncture needle. You cannot recognize meningitis in the early stage without a puncture needle. Local anesthetic makes it painless, and I think it ought to be done with a fairly large needle. Sometimes if there is not enough flow it is best to withdraw the tip of the needle and permit the fluid to flow.

DR. HARRY BOYD-SNEE (closing): Let me mention something of interest in connection with suppurative meningitis which developed as a terminal complication in a group of cases which I have had an opportunity to follow from the initial inflammatory reaction in the middle ear to the termination of the case in every instance. In 276 individuals the diagnosis of streptococcic osteomyelitis of the temporal bone was established by findings in operation and cultures taken from the diseased areas and supplementary corroborative autopsy findings were available in 24 cases. The termination was fatal in 31, making the mortality 11 percent. The immediate cause of death in 29 of the cases was streptococcic lept meningitis; 2 only of the total number of fatalities died of other causes; 1 died of pneumonia that developed five weeks after operation, an incident in an epidemic; the other case died of general pyemia in connection with a septic thrombosis of the lateral sinus. From this we perceive that 93 percent of the total mortality was a result of suppurative meningitis. In 6 of these cases of fatal suppurative meningitis we were able to discern that the meningeal complication developed subsequent to an intercurrent brain abscess, and in 5 followed a septic thrombosis of the lateral sinus.

What proportion of meningitis arises from ear infections I have been unable to ascertain; however, I will venture to say that a very great number of cases of the suppurative type are of otitic origin.

I would like to emphasize the importance of early paracentesis in acute otitis media, not only as a measure to afford free drainage of the tympanic cavity, but also as a procedure by which the identity of the causative bacteriological factor can be established culturally from the tympanic exudate. The significance of the streptococcus organism when it is present in the tympanic exudate must not be gainsaid.

We all recognize the importance of early diagnosis in any case of acute otitis media, and that that type of ear complication is much more frequently met with in the experience of the general practitioner than it is by the otologist. Now with this knowledge I want to sound a warning. I have pointed out, gentlemen, that operative

injury to stapes' foot plate might be as potential a factor in precipitating a meningitis as could arise from a skull fracture which involved the inner plate in the temporal region or a crack through the labyrinth.

An acute otitis media imposes on us the responsibility to exclude concomitant meningitis, and this is especially necessary in children and infants with immature or incomplete development of the temporal. Paracentesis, bacteriological examination of the tympanic exudate and spinal fluid findings through a lumbar puncture will establish the diagnosis as well as indicate the prognosis.

THE ENDONASAL OPERATION OF THE LACRIMAL SAC*

WILLIAM B. CHAMBERLIN, M.D.
CLEVELAND, OHIO

In 1917, the writer had the honor to present a paper on the foregoing subject before the Section on Ophthalmology of the American Medical Association, reporting at that time some eight cases, with one failure. Since that time, ten cases have been operated upon, with no failures as far as restoration of physiological function was concerned, though not all were free from pus. As in the previous series, secondary operations were performed on three cases. Such a series is not large in number, but is sufficient from which to draw certain conclusions.

Anatomy. A detailed description of the anatomy of the canaliculus, sac and duct may be gained from the better text books. To those less familiar with the anatomy, the accompanying illustrations may be helpful. The anatomical essentials, from a point of view of disturbance of function, are that the passageway for the tears presents two constrictions, one where the sac joins the duct and another where the duct enters the nose. This latter constriction is increased by the presence of a distinct valve, the so-called valve of Heister.

Indications. Briefly, the endonasal operation may be said to be indicated whenever the normal passageway for the tears has become obstructed and the ordinary, conservative measures for restoration, such as probing and irrigation, have been unsuccessful.

External Operation. This operation, revived by Berlin in 1863 and subsequently by Toti in 1904, presents certain decided disadvantages. The external operation, even if successful, insofar as the cure of the abscess was concerned, did not cure the epiphora. This condition so annoyed and inconvenienced the patient that the subsequent removal of the gland became necessary. The resulting scar and its subsequent contracture was frequently unsightly. Occasionally too a fistula remained. These disadvantages

(*) Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the Muncie session, September, 1922.

prompted West in 1908 to attempt the operation from within the nose, rather than from without, and to thus restore the normal and physiological drainage into the nasal cavity.

Endonasal Operation. The advantages of this over the previous methods, to quote from West, are as follows:

"1. The physiologic function of the path for the tears is again restored, so that not only a suppuration of the sac, a lacrimal fistula or a phlegmon is healed, but also the tears flow normally through the nose. A later epiphora is accordingly avoided.

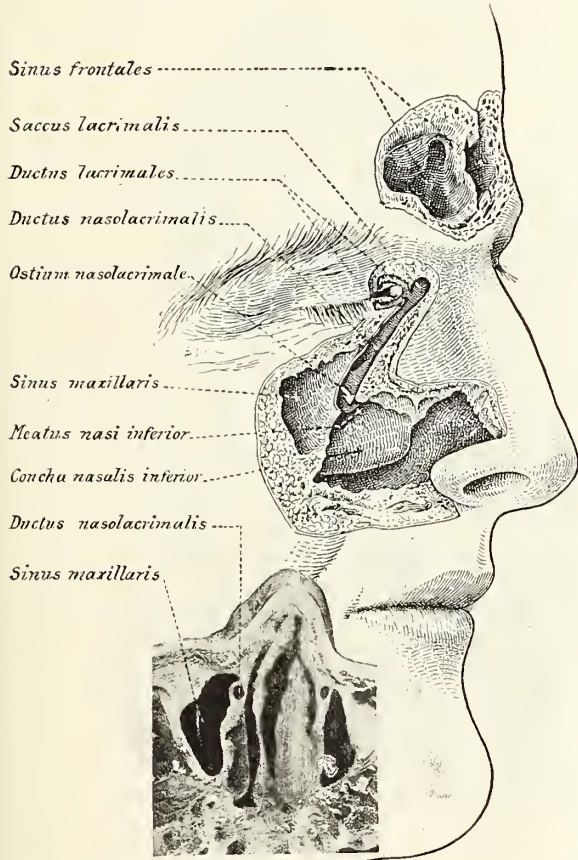


Fig. 1. A dissection showing the nasolacrimal passageways and the relations of the nasolacrimal duct to the maxillary sinus and the inferior nasal meatus. The inset is a transection of the nasal fossae, the maxillary sinuses, and the nasolacrimal ducts.

By courtesy of P. Blakiston's Son & Co. Schaeffer. The Nose and Olfactory Organ.

2. A so-called cure by probing is rendered unnecessary.

3. The lacrimal gland is spared.

4. A skin incision or a curetting from without, with eventual scar formation, is avoided."

The disadvantages seem to be two only. Certain persons it is true, by sharply blowing the nose, can force air out through the canaliculus. This objection would seem to be theoretical, rather than practical, as West asserts that this condition was never complained of by his patients.

My attention has been called to another disadvantage by Dr. William E. Bruner, by whom most of my cases have been referred. In certain cases where there was a complete restoration of physiological function, it was still possible to express slight traces of pus through the punctum on milking the sac. Such a condition would of course render a cataract operation impossible, on account of the danger of infection.

Operation. The most popular methods of operation at the present time are four,—those of West, Yankauer and Mosher, and more recently the operation of Wiener and Sauer, reported and described by them before the last meeting of the Section on Ophthalmology of the American Medical Association. The operation of Yankauer I have performed on the cadaver and once upon the living. It is both ingenious and difficult. The objection would seem to be that it confines itself rather to the duct than the sac, in an endeavor to restore the passageway into the inferior meatus. It seems to carry too great a danger of subsequent stenosis at the junction of the sac and duct.

The operation of Mosher I have performed only on the cadaver. With the operation of Sauer and Wiener I am not familiar.

My operation of choice is that of West, with slight modifications, too unimportant to possess any merit as to originality. After preliminary cocaineization and infiltration of $\frac{1}{2}$ percent novocain, to the drachm of which two minims of adrenalin have been added, a three-sided incision is made. The first two incisions are parallel with the floor of the nose and extend as far forward as possible from two points, the upper from the point of attachment of the middle turbinal and the lower from a point opposite the free border of the middle turbinal. For these incisions the right angled knife of Freer is exceedingly well adapted. The anterior ends of these incisions are then joined by a vertical incision made as far forward as possible and carried well down to the bone. This flap is now elevated submucously, the periosteum being of course included, and is deflected backward; as on a hinge, between the middle turbinal and the septum, where it is held out of the field during the remainder of the operation by a small pledget of cotton.

The posterior lip of the dense ascending process of the superior maxilla is now attacked with chisel and gouge until the nasal wall of the sac is presented to view. This is easily recognized by palpation with a probe. Sufficient bone should be removed to uncover the sac freely in almost its entire nasal aspect. At this point I have found it of advantage to insert a probe through the canaliculus into the sac, thus pushing its nasal surface, tent like, well over toward the septum. A thin scalpel is then inserted between the probe and the lateral nasal wall, the outer or free end

of the probe being held by an assistant or fastened to the forehead by a strip of adhesive. By so doing it is possible to resect a larger portion of the sac. Loose pieces may subsequently be removed by means of the smallest sized forceps of Gruenwald. West's dictum, that at the completion of the operation the probe introduced through the canaliculus into the sac must pass horizontally into the nose should be strictly adhered to. The submucous flap is now replaced, its upper half covering the sac resected and the lower portion held in position

this operation on all possible types of cases and in 1913 reported 130 operations with 90 percent of cures.

One of my most interesting cases was a fourth year medical student who had suffered from suppuration of the sac and constant epiphora. He had developed a habit spasm and would unconsciously squeeze out the secretion from the sac every few minutes during his waking hours. Subsequent to the operation this habit disappeared.

Difficulties. That the endonasal operation

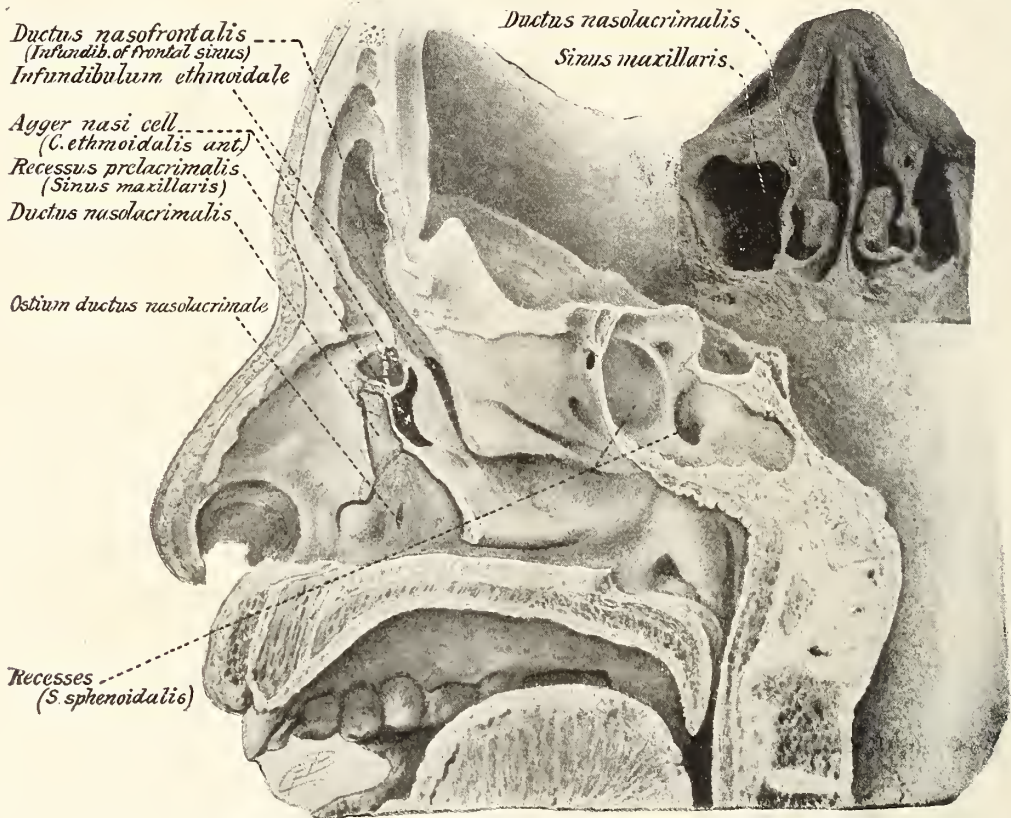


Fig. 2. A dissection of the lateral nasal wall with especial reference to the nasolacrimal duct, the lacrimal sac (indicated by dotted outline in white), the agger nasi cell, the pre-lacrimal recess of the sinus maxillaris. The inset is a transection showing the relations of the nasolacrimal duct. By courtesy of P. Blakiston's Son & Co. Schaeffer. The Nose and Olfactory Organ.

for twenty-four hours by light packing. Subsequently the nose should be kept free from crusts until healing takes place. If desired the sac may be irrigated through the canaliculus. I have not always found it necessary. I have sometimes wondered if the replacement of the lower portion of the flap might not be dispensed with.

My results from this operation, as far as restoration of the physiological pathway is concerned, have been uniformly good. As before mentioned, it occasionally has been possible to express a slight amount of pus from the canaliculus. So far I have not operated upon any cases of acute abscess. West has performed

presents certain decided technical difficulties is undoubtedly true. My feeling is that it is performed by comparatively few rhinologists for two reasons: (1) On account of the *fancied* difficulty and (2) because of the unwillingness of the ophthalmologist to refer appropriate cases. As regards the first—the operation, to my mind, is no more difficult than the average submucous resection. An absolute knowledge of the anatomy is of course essential. The operation should be performed at first upon the cadaver until this knowledge is attained. As regards the second—the operation is, or should be, an example of *team work* on the part of the

ophthalmologist and rhinologist, just as the correction of mouth breathing is, in many cases, the result of team work on the part of the rhinologist and orthodontist. Each is essential to the success of the other. Fortunately the man who embraces all four specialties in his domain is becoming the exception, rather than the rule, so it is only by the courtesy of the ophthalmologist that the rhinologist may obtain cases.

The purpose of this paper is not to describe

DR. G. W. SPOHN: I do not believe anyone is successful in the removal of only a part of the sac. It seems to me the sac is a pyogenic membrane to begin with. In the old cases of dacryocystitis you have a pyogenic membrane to contend with. We have a great many cases of erysipelas due to dacryocystitis, and we have a streptococcic infection. Naturally if the membrane is taken away without anything else we have an infection left. With the tears running

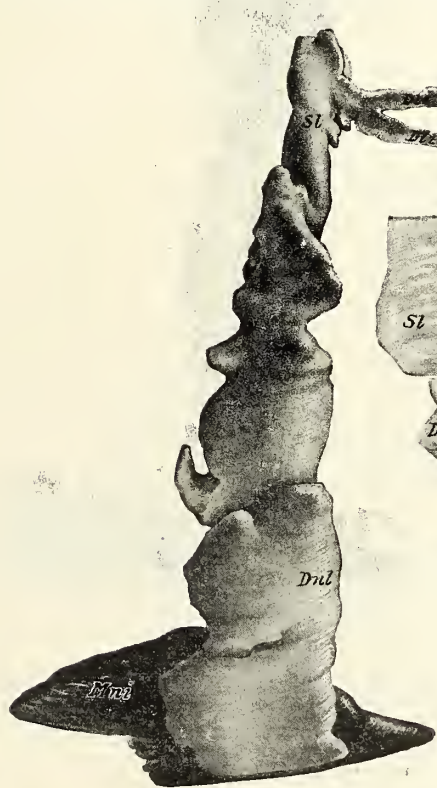


Fig. 3.



Fig. 4.

Figs. 3 and 4. Reconstruction of the nasolacrimal passageways of an adult aged 65 years. Fig. 3 represents a medial view and Fig. 4 a lateral view of the model. Especially note the irregularity and diverticula of the nasolacrimal duct.

The inset accompanying Fig. 3 shows the details of the side to side union of the lacrimal sac and the nasolacrimal duct; moreover, illustrates the large bud-like diverticulum from the nasolacrimal duct. x 3. 2.

By courtesy of P. Blakiston's Son & Co. Schaeffer. The Nose and Olfactory Organ.

any original technique, but to present a record of my own successes and *failures*, in the hope of stimulating interest in an operation which may bring relief to many and which, it would seem, should have a wider popularity than it at present enjoys.

DISCUSSION

DR. G. W. SPOHN (Elkhart): I should like to ask Doctor Chamberlin how long it takes to do this operation; how long it takes to anesthetize the part before operation; how long it takes the patient to get well after the operation, and whether you have epiphora afterward. Do you remove the whole sac?

DOCTOR CHAMBERLIN: No, I do not remove the whole sac.

down through the nose I can see very clearly how it will keep the part open.

I wish Doctor Chamberlin would explain the difference between his operation and other operations performed for the same purpose.

It is my opinion that these cases should be divided into two classes. In certain cases I would hesitate very much to operate on them without removing the whole sac. I believe in complete extirpation of the sac. While I would not be afraid to do the other operation, I have not done it so far.

DR. G. H. McCASKEY (Indianapolis): I would like to ask the essayist what his experience has been as to the percentage of cases he

has observed of luetic origin, and how many of them can be cleared up with specific treatment along with drainage and complete curettage of the diseased membrane of the sac.

DR. HARRY BOYD-SNEE (South Bend): I would like to ask Doctor Chamberlin what his personal experience has been in doing total extirpation of the lachrymal sac by the external route, and if he entertains the objections raised by other rhinologists to the procedure, namely, scarring and persistent epiphora, in favor of the intranasal operation and partial resection of the sac.

I would also like to inquire how he would proceed in the event of meeting an obvious osteitis in relation to the diseased lachrymal sac, and if he would not consider such a condition an imperative indication to conclude his operation through an external incision.

I have had some experience in lachrymal sac extirpation. During the winter and spring of 1907 I had an opportunity in the Heidelberg eye clinic to observe the end results of this operation in over 200 cases. Since that time in my practice I have done more than 70 total extirpations by the Mueller-method with uniformly satisfactory results. The operation should be restricted to selected cases. Tubercular disease is a contraindication. The complications, so far as I have been able to observe, were invariably incidental to faulty technique; penetration of the orbital cavity was followed by protrusion of fat and annoying hemorrhage; but failure to remove the sac complete with the canaliculi is responsible for scarring and fistula, and persistent epiphora and catarrhal conjunctivitis are generally found to be indications that some particle of the mucous membrane has been left behind. With this experience I am reluctant to accept the intranasal partial resection of the lachrymal sac as an operation to supplant total lachrymal sac extirpation.

DR. C. N. HOWARD (Warsaw): I have been wondering whether the operation described is not more suitable for the middle-aged or younger people than those more elderly. I feel that the removal of the sac is all that is necessary in the elderly person who has not much longer to live and who wants a maximum of comfort with a minimum of discomfort in attaining it. In a comparatively limited experience I have had good results in the removal of the sac, not only in elderly but in younger persons who have had dacryocystitis for several years.

While that method is not so good from the scientific standpoint of maintaining function, practically it stops the source of irritation to the eye. When that is stopped there is not apt to be much, if any, epiphora remaining. Furthermore, there is then no possibility in blowing the nose of forcing nasal secretions into the eye through a new nasal opening. If this should happen to a healthy eye it would cause only



Fig. 5

Fig. 5. Reconstruction of the nasolacrimal passageways of an adult aged 60 years. Note the regularity of the nasolacrimal duct and the gradual mergence of the lacrimal sac into the nasolacrimal duct at the construction of the isthmus. x 3. 2.

Abbreviations as in Figs. 3 and 4.

By courtesy of P. Blakiston's Son & Co. Schaeffer. The Nose and Olfactory Organ.

passing discomfort; but should it happen to an eye just operated for cataract it might be a matter for great regret. If such a possibility could be foreseen, of course ligatures might be thrown around the canaliculi before operating.

DR. ALBERT E. BULSON, JR. (Fort Wayne): the aim of every ophthalmic surgeon, as well as every rhinologist who has to treat obstruction of lachrymal drainage, is to establish physiological action. I have tried almost everything that has been proposed for the relief of dacryocystitis, from the injection of fluids and dilatation to removal of the sac and finally the intranasal operation. I have long since abandoned probing as practiced in the olden days. Of late years I have had some—and I emphasize the word some—good results from rapid dilatation with large probes as practiced by Ziegler. I have seen some troublesome cases of dacryocystitis clear up after the nasal duct has

been opened by the Ziegler method. The objection I have to the removal of the sac is that while you may cure the dacryocystitis you still have epiphora when the eye is irritated by wind, smoke or by foreign particles of dust. I grant you, curing the dacryocystitis is a consideration to be desired, but epiphora is most annoying. It does not annoy individuals when they are indoors as ordinary evaporation takes care of that, but it does annoy them when out doors. I have had a number of patients for

to be chiseled out in order to uncover the sac.

I want to emphasize the necessity and importance of follow-up treatment. Dr. Chamberlin referred to it, but it is highly important that these cases be under your observation so that granulation tissue and any possibility of closure of the new formed opening may be avoided. I believe that the failures to secure good results from this operation, as reported by some surgeons, is due either to an insufficient opening, or failure to keep the opening

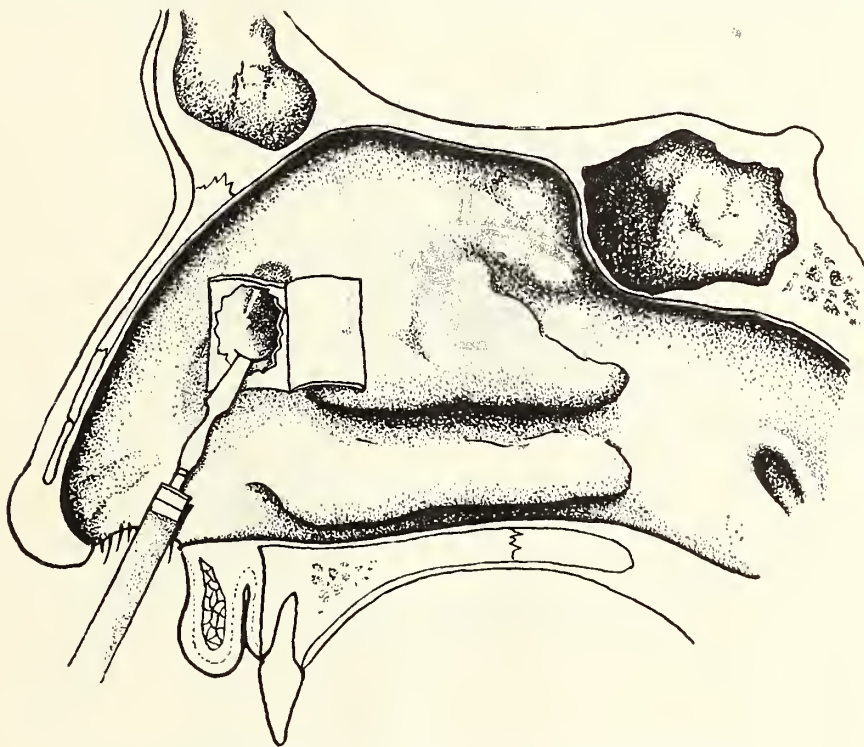


Fig. 7. Flap turned back and incision being made through bone.

whom I have extirpated the lachrymal sac who eventually have had ectropion from exposure to the atmosphere. I also have seen some cases of marked dermatitis caused by overflow of tears. Therefore, there are objectionable features accompanying the removal of the sac, even if you cure the dacryocystitis.

I have had some good results from the West operation. I consider it the operation of choice. It is not a difficult operation, as operations go. There are cases in which, it occurs to me, you will have some difficulty as a result of malposition of the middle turbinate and distortion of the septum, requiring resection before you do the endonasal operation, but, any man who knows his anatomy and has the ordinary surgical skill can do it and obtain satisfactory results. You will be surprised to know how dense the bone is, and probably it will strike you that you are going to get into deep water when you find that dense bone has

free from granulation tissue during the early weeks subsequent to the operation.

DR. C. J. ADAMS (Kokomo): I understand from some ophthalmologists that the epiphora does not always stop; that the operation is not a mechanical success in some of these cases, and there is doubt in my mind as to its efficacy.

DR. WILLIAM B. CHAMBERLIN (closing): I feel very much gratified at the discussion which my paper has brought out. When a man presents a paper before a section of this kind and it receives no discussion, he feels he has gotten into the wrong pew or the wrong church.

In answer to the question of Dr. Spohn as to the time required for the operation: it takes as long to perform this operation as it does to perform a submucous resection. I remember when it took me an hour and a half for a submucous resection, but I am able to do this operation now in seven minutes; the average time would be fifteen minutes. I do not mean from the time

I start cocainization, but from the time I start operating until I finish. So it does not take any longer to perform the endonasal operation than it does to perform a submucous resection. The cocainization and infiltration with novocain takes as long as for a submucous resection but no longer.

The convalescence is a variable factor. I see these patients only in conjunction with an ophthalmologist. I keep the inner end of the opening free and the ophthalmologist takes care of the outer end. He passes the probe. Sometimes

these patients only come to me as they are referred to me by ophthalmologists. I would not get them otherwise.

Doctor McCaskey asked about lues. I do not know anything in regard to this. These cases were referred to me by ophthalmologists and I suppose lues had been excluded.

Doctor Boyd-Snee speaks of total removal of the lachrymal sac. Many of the cases of total removal of the lachrymal sac which I have seen by chance have presented rather unsightly scars. A scar on the foot or leg is one thing,

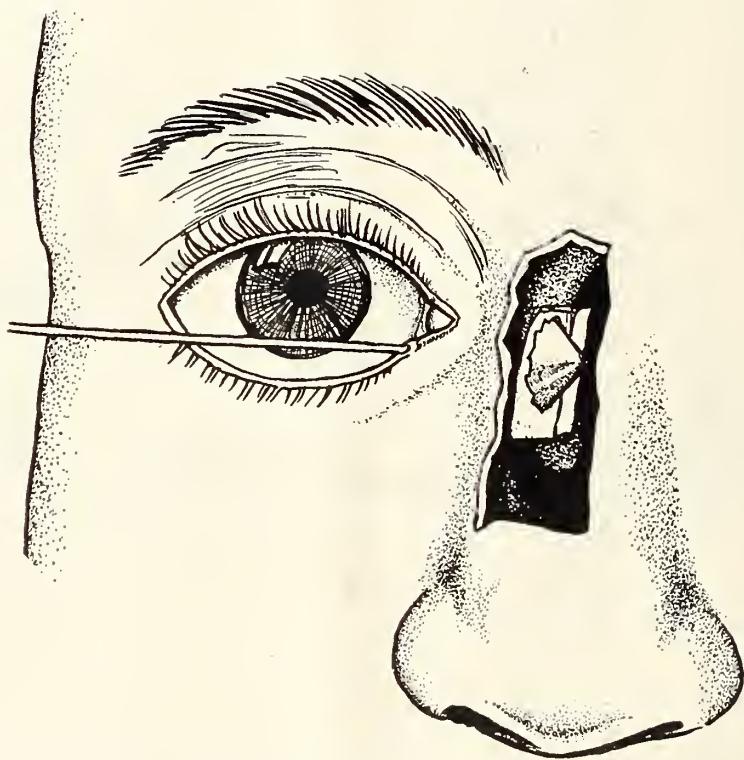


Fig. 8. Showing sac bared and probe passing horizontally into the nose.

he irrigates from the canaliculus into the nose.

In regard to the little girl: I operated upon her a week or ten days ago. Before coming away I was able to express a little pus from the canaliculus in the morning. I saw her two or three times, and the ophthalmologist who referred her to me had also seen her.

DOCTOR SPOHN: In the case of the little girl did you remove all of the sac?

DOCTOR CHAMBERLIN: With regard to the resection: what one resects is the inner wall of the sac, leaving the outer wall. The inner wall of the sac is represented by my right hand (indicating); I take that away; I leave the outer wall of the sac, leaving the mucous surface presenting on the outer wall of the nose.

As these patients have been probed so long, they are willing to submit to anything. I am not an ophthalmologist; I am a rhinologist, and

but a scar over the frontal sinus from a badly performed Killian operation, or a scar from a lachrymal sac operation, is another thing. A scar on the face is an awful looking thing, but it does not amount to much in another part of the body. When you have a scar at the inner canthus of the eye, that patient is deformed.

I have not had any experience in the total removal of the lachrymal sac.

With regard to the external, versus the internal operation: I can see where the external operation may be absolutely indicated; but I think if one can get away with the internal operation it is far preferable. Just as in many of my mastoid cases, where I do the simple mastoid operation, I have come to the conclusion by long experience that it is better in many cases to perform the simple mastoid operation, and if I cannot get away with a simple mastoid

operation, I still have the radical mastoid operation to fall back upon. If I *can* get away with a simple mastoid operation, I get a far better result as far as the hearing is concerned. However, I tell these patients that it may possibly be necessary to perform a radical mastoid operation later; just as in these cases which we are discussing it will be well to tell the patient that you are doing a conservative operation first, and if this should fail, you still have the external operation to fall back upon.

In the presence of an osteitis, of which Dr. Boyd-Snee spoke, one may be forced to do the external operation at first.

With reference to the remarks of Doctor Bulson: I have never seen these patients suffer from epiphora after this type of operation. Epiphora is a troublesome thing if you are out in the wind. To people whose work is in the open the constant wiping away of tears would be very annoying.

A fourth year medical student had gone through two or three years of school with a constant epiphora. He was constantly wiping his eye and had developed a habit spasm. Epiphora is something which I do not believe we can afford to overlook.

Doctor Bulson spoke of the malposition of

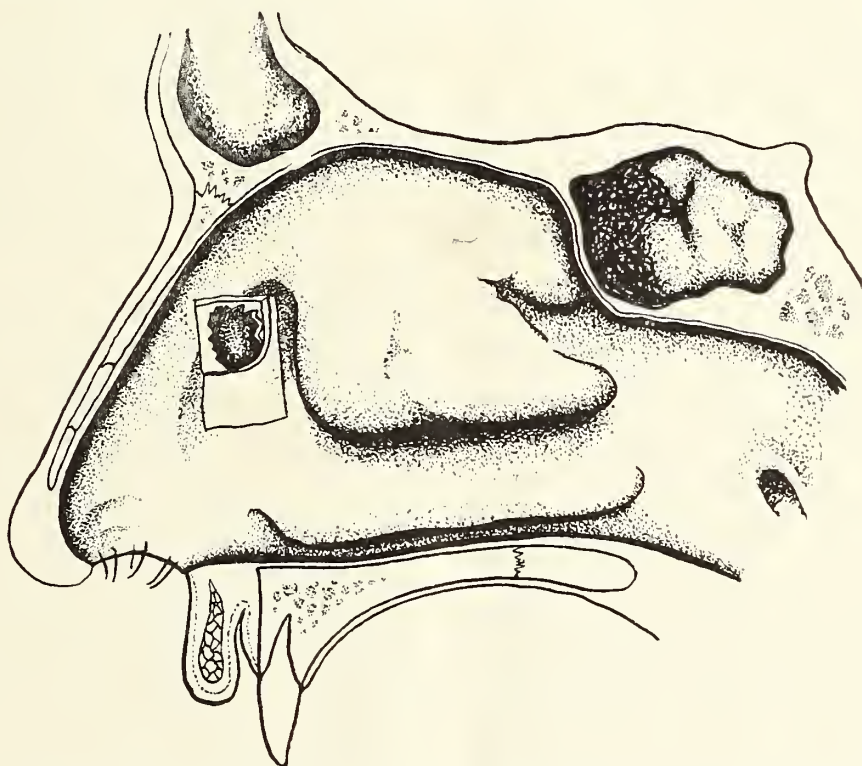


Fig. 9. Lacrimal sac bared above. Flap replaced; the flap cut away above to show this.

Dr. Howard asked about the age of the patient. You perform this operation on older patients and the external operation on the younger patients. You cannot perform a submucous resection on a young child; the external opening of the nose is too small. In attempting to perform this operation on younger children, the tissues are embryonic in type, and the bleeding is much more troublesome.

About the girl of fourteen: she was well developed, and rather phlegmatic; she had a fairly good sized nose, and I had no difficulty. In a child of four to eight years of age you may have great difficulty in seeing exactly what you are doing. This is absolutely necessary in this type of operation.

the septum. This boy (the fourth year medical student) had had a previous resection of the septum. The only result of this was a wide perforation of the septum. The upper portion of the septum had not been taken away and I had to resect the upper portion of the septum before performing the lachrymal sac operation.

As to the density of the bone: it is surprising. You feel as if you are driving your chisel into a piece of concrete.

Follow-up treatment is very important. These cases should be kept under observation until we know they are cured; by that I mean that they should be observed by a rhinologist who can see that granulations do not reform around

the inner nasal opening, and they should likewise be observed by an ophthalmologist. Personally, I do not pass probes or make injections; I have done it a few times but I feel like a cat in a strange garret.

Doctor Spohn spoke about drainage in these cases. We do establish drainage, and this has cured the majority of these cases; just as when you establish drainage through the inferior meatus for a chronic suppuration of the antrum, oftentimes your Luc-Caldwell operation will not be necessary. Likewise, when we establish drainage of the nasofrontal duct internally, a Killian operation may not be necessary. So the simple fact of the establishment of drainage cures the vast majority of these cases without doing anything more.

Doctor Spohn spoke about the comparison of the Yankauer and West operations. I can hardly explain that fully without running some of these slides through again and time does not permit. (Here Doctor Chamberlin demonstrated diagrammatically the Yankauer operation.)

Doctor Adams spoke about the epiphora not always ceasing. I had one case where I got a bad result. The patient was a nervous, refractory girl, and I got into the antrum. I cannot see how, if we keep the inner end open, we should have an epiphora. The tears will flow through into the nose. They have a much shorter course to follow.

SOME OBSERVATIONS ON GALL-BLADDER SURGERY*

SIMON J. YOUNG, M.D., F.A.C.S.

GARY

The gallbladder is a storm-center for discussion these days. Some there are who look upon it as a vestigial organ, with no special function. Others maintain that it has important work to do and cannot be removed with impunity. It has been suggested, even, that it secretes a hormone which acts upon the liver and pancreas, influencing the secretions of those organs.

That the gallbladder has a function is borne out by many investigators.

Robson raises the question (which can be answered only by the elapse of time) whether cirrhosis of the liver and pancreas will not result in a certain percentage of cases after cholecystectomy. Rous and Larimore have reported that ligation of the common duct is capable of producing cirrhosis. Henschen has this to say: "In spite of its small capacity the gallbladder serves as a pressure reservoir for regulation of the biliary flow according to the biliary demands of the digestive organs. It acts also, however, as a secreting organ, adding some element to the bile which is important for the

chemical economy of the biliary flow and the action of the bile."

Two things have been pretty well proven to my mind: First, the gallbladder is a concentrator of bile; second, this concentration is brought about largely through lymphatic absorption. Rous and McMaster, of the Rockefeller Institute of Research, in 1920 published the results of experimental work bearing out the first of these assumptions, while Harer, Hargis and Van Meter, Department of Surgical Research, University of Pennsylvania, recently have confirmed these experiments, and have demonstrated upon dogs that chemical substances injected into the gallbladder are taken up by the lymphatics of that organ and carried to lymph nodes surrounding the head of the pancreas. In their paper they have dwelt extensively upon the lymphatic circulation of the gallbladder, and show that its vessels not only collect lymph from the gallbladder itself but communicate freely with vessels from the liver. The lymph drainage from the gallbladder, as stated, reaches a chain of nodes adjacent to the head of the pancreas, which chain also drains the pancreas.

Inasmuch as pancreatitis is a frequent complication of cholecystitis, and in view of these findings, it is not unreasonable to assume that infection may reach the gallbladder from the liver by either of three routes. It may be absorbed from the bile, it may come through the blood, or through lymphatic anastomoses. In either case it results in interstitial inflammation of the gallbladder. Passing then to the lymph nodes around the head of the pancreas it causes here a lymphadenitis with node enlargement, pressure, and consequent stasis in the pancreatic vessels. Such stasis may account for those cases of pancreatitis involving the head, and in which the pancreatic secretions and tissues appear to be sterile.

Neither is this theory in conflict with current ideas about focal infections, because any infection is liable sooner or later to reach the liver, which organ destroys much of it but not necessarily all. Other types of pancreatitis may be the result of direct infection through the blood supply, while some are doubtless secondary to gastric and duodenal ulcers.

The numerous adhesions about the organ are, of course, caused by prolonged or repeated attacks of infection, either in the gallbladder itself or occasionally in the duodenum or other adjacent viscera.

There has long been doubt as to the etiology of gallstones. I believe, decidedly, that the greatest factor in their production is infection. I believe, too, that gallbladder infection is usually secondary to hepatitis, and my clinical experience leads me to the conclusion that chronic appendicitis is an etiological factor in many

(*) Presented before the Surgical Section of the Indiana State Medical Association at the Muncie session, September, 1922.

cases. The infection might reach the liver through lymphatics or through the portal veins.

It would seem unnecessary to emphasize the importance of early interference. We know the likelihood of complications, such as adhesions, cholangitis, pancreatitis, common duct obstruction, to say nothing of the more remote but none-the-less important effects upon heart, blood vessels, joints, and other structures. Still, knowing these things, we have often procrastinated in urging upon patients the importance of surgery, temporizing with drugs, diet and other inefficient methods. Lately we have another procedure, growing out of the Meltzer-Lyon test, and advocated by their followers as a method of treatment. Recent experiments have thrown much doubt upon the efficacy of magnesium sulphate drainage as a diagnostic procedure, while as a method of treatment it is open still more to question. Granting that it affords drainage, the brevity of each drainage period scarcely affords opportunity for permanent therapeutic effect. It is probably inefficient and will result in further delay in many cases until complications ensue.

This paper is not concerned with detailed methods of diagnosis. I am not assuming that diagnosis is easy. It is not. But methods of diagnosis are well established, and are matters of routine with which surgeons are presumably familiar. It may not be amiss, however, to point out that many cases of gallstone disease go unrecognized for years, masquerading as indigestion and other indefinite entities. To the end that surgical treatment may be instituted early, we owe it to our patients to follow up every clew which presents, however slight, remembering that vigilance is the price of success.

Two physical aids to diagnosis have been described recently which may be new to some, and which I believe deserve mention: Friedman has directed attention to tender points along the right axillary, scapular and posterior-median lines on a level with the gallbladder, while Lyon has described a method of determining adhesions between the stomach and the gall tract. It consists in auscultation with the stethoscope over the stomach while a vibrating tuning fork is placed over the liver. Normally the note of the fork is indistinct. Adhesions are presumed if the note is transmitted with the same intensity as when placed over the stomach. Attention is directed to these aids to the end that they may contribute to early diagnosis.

W. J. Mayo has pointed out that perforation of the gallbladder often terminates fatally—not by reason of any special virulence of the infection, but because the symptoms of perforation resemble the signs of colic, and, being mistaken for one of the usual attacks, the case is neglected until peritonitis is well established.

While it is not always possible to make an exact diagnosis in disease of this region, it is

possible in most cases to diagnose disease of the biliary tract. Although every effort ought to be made to determine exact pathology, a failure to do so should not preclude operation. In fact it is neither necessary nor wise to determine operative procedure in advance. When the abdomen is opened, and not until then, in gallbladder disease, are we in position to decide between cholecystectomy and cholecystostomy. And a careful examination of the field is necessary prior to such decision.

In general it might be said that cholecystectomy is indicated in strawberry gallbladder, hydrops, cicatricial obstruction of the cystic duct and malignancy, provided the latter is operable. Likewise we would say that the radical operation is contraindicated in acute cholangitis; in cancer of the head of the pancreas (because of the possibility, later, of complete obstruction of the common duct); in cases of cholelithiasis where multiple stones in the ducts are liable to produce obstruction; in certain cases of malignancy (W. J. Mayo) where radium treatment might be desirable, the gallbladder to be used as an avenue for its insertion; in pancreatitis; in malignancy with jaundice; in cases of great debility or other factor necessitating haste; in dense adhesions and in other conditions which will suggest themselves to the careful surgeon.

Generalizing again, I favor conservatism. I am not prepared to believe, with some, that cholecystectomy is an operation of choice. Neither do I believe that it affords a cure in greater proportion than cholecystostomy. Judd reports a group of cases wherein typical attacks of hepatic colic recurred five and six years after cholecystectomy. I believe a careful analysis of cases will show as good results for drainage, when properly done, with careful removal of all stones, as for the more radical procedure.

The gallbladder possesses a function; it is not a useless organ. Routine removal, therefore, is not to be thought of except to be condemned. Until we arrive at more exact knowledge as to gallbladder function, and until we have a preponderance of evidence of the superiority of excision, the rule should be to drain where the gallbladder shows a chance for recovery. Do a cholecystostomy unless positive indication exists for excision.

Ideal cholecystostomy should not be lost sight of in a few selected cases: for example, a symptomless stone found during exploration, or a gallbladder opened for inspection and showing no pathology, might be treated thus. A very careful technique must be observed, in order that the wound may be closed without drainage.

Regarding technique, I believe in simplicity. With as little traction and traumatism as is consistent with thoroughness, I drain the average case, using the tube and technique suggested by Mayo. If a duct needs draining I prefer to insert a cigarette drain to the site, with a suture

or two to hold it in place, rather than attempt difficult intraduct drainage. It is equally as efficient, easier to accomplish, and is removed with less traumatism to the duct itself. In cholecystectomy, if not too difficult, I attack the gallbladder first at the duct extremity. Here we must be careful to identify our structures, having in mind aberrant arteries and ducts, and this can be done only by opening the gastro-hepatic omentum. In some cases it is easier to begin at the fundus.

As factors of safety in cholecystectomy I would suggest the following points:

1. Long incision.
2. Opening of the right free border of the gastro-hepatic omentum.
3. Careful dissection of blood vessels and bile ducts.
4. Ligation of cystic artery close to the gallbladder.
5. Severing of the cystic duct close to its union with the hepatic.
6. Opening of choledicus as far from duodenum as possible, to avoid hemorrhage.
7. Separate ligation of duct and blood vessels.
8. Gentleness in technique to avoid shock.
9. Drainage if in doubt.

In all cases simplicity should be our watchword, and while we must be thorough our zeal for thoroughness should not outweigh our better judgment.

Many of us will recall the days when acute peritonitis was treated by methods so vigorous that the mortality was frightful. Until the clarion voice of the late John B. Murphy was raised in protest surgeons irrigated the abdomen in these cases. Some rubbed and scrubbed and even eviscerated their patients in a mistaken zeal for thoroughness. No one does these things now, and we save our patients. So, in gallbladder surgery, I repeat, let us be thorough but not brutal. Let us ever be mindful that a human life is at stake, and be gentle in our ministrations, doing no more than is necessary to effect a cure.

Let us, of course, ablate gallbladders which, in the language of Porter are "useless or dangerous by disease", preserving others and curing our patients by gentler means (cholecystostomy), and thus earn their gratitude and ourselves sleep o' nights.

DISCUSSION

DR. E. S. JONES (Hammond): I would like to report a case, an empyema of the gallbladder. This patient was in a state of collapse when I saw her, so I decided to go in immediately, under local anesthesia. I drained the gallbladder, left the drain in for quite a while, and finally the tube came out and the gallbladder closed up. The patient was very ill, so it was necessary to do something again. We thought

about doing a cholecystectomy, putting a tube in the common duct, but we could not do that on account of acute condition and albuminuria, so we drained the gallbladder again, and the patient improved. Later we did a cholecystectomy, putting a rubber tube through the cystic duct into the common duct. This drained for about four weeks. The patient was losing weight and was in a critical condition, with no bile passing into the intestine. We did not feel justified in inserting a duodenal tube as often as would be necessary to give her the amount of bile necessary. We collected all the bile passed in twenty-four hours, 1500 cc., inspissated it and put it into salol-coated capsules and gave them. Inside of twenty-four hours the sphincter of Oddi opened, the bile began to flow into the duodenum, and inside of a week the bile entirely quit draining through the common duct tube, the patient cleared up and in six weeks had gained twenty-five pounds in weight.

DR. G. G. ECKHART (Marion): When I received the request to discuss Doctor Young's paper I sent out one hundred questions to patients I had operated in 1916, 1917 and 1918. They were equally divided according to 'ectomies and 'ostomies. Up to Wednesday twenty-nine of each have been returned. Of the 'ectomies the results were good in 19; fair in 8; bad in 2. Of the 'ostomies 15 were good; 11 fair, and 3 bad.

I have never used the fundus route. I want a good exploratory incision, with the patient thoroughly relaxed so I can rotate the right lobe of the liver, and so I can see what I am doing in attacking from the duct end. I have never had any trouble. Some years ago Doctor Eisendrath drew our attention to leaving stones in the common duct or hepatic duct, he having operated on several persons who had been operated for gallstones and these stones left behind. I follow the plan Doctor Young has suggested, in that I nick the gastrohepatic omentum and push the fatty tissue down and isolate the duct and artery. I do not proceed unless I can do this. Then it is easy to dissect the gallbladder.

At the last session of the A. M. A. at St. Louis, Charles H. Mayo in reading his paper on obstructions of the intestines, said that fifteen years ago more patients got well after operation for appendicitis than now. It seems to me there is a good deal of work still needed along this line. The physiologists know more about the function of this part of the body today, and I think they are better able to decide which is the best operation to do, although I feel at the present time that indications are clearly laid down as to which to remove and which to drain.

I am in accord with Doctor Young in his conservatism. I think all gallbladders that have been functionless, where the muscle coat has

been replaced with fibrous tissue, should be removed. I never remove a gallbladder if there is an acute inflammatory process; I always drain it and remove later. I think a gallbladder with stones in it and very little pathology outside of the stones, should be drained, not removed. I have seen them return to normal. I have changed my mind several times in regard to gallbladder surgery, and I may change it again.

DR. H. A. DUEMLING (Fort Wayne): I would like to say that cholecystectomy in all the conditions Doctor Young has mentioned are all right, except that he forgets to include a whole lot. Every bladder that has stones in it should be removed. I differ very much from the statement made by Dr. Eckhart that such a gallbladder should be incised and the stones taken out. It is all right if you could do that, but you cannot be sure you get all the stones out. Furthermore, if you use a curette you will probably injure the lining of the gallbladder. When a man like William Mayo says it is impossible for him to palpate with certainty stones in the common duct, I believe we should listen.

A cholecystostomy should only be done in those cases which really do not need to be operated. Do you want to leave a bladder full of pus and put a drain in? Surely not. Doctor Young has demonstrated the channels of infection into the pancreas and liver. Do you want to leave that infection there? No.

Doctor Young makes the point that the common duct should be opened far away from where it enters the duodenum, and correctly so, because there is less danger from hemorrhage.

DR. JOHN H. EBERWEIN (Indianapolis): I agree with Doctor Duemling that in attacking the gallbladder we should begin with the fundus. If you begin at the duct end and things are not just right you go back to the fundus, so why not begin there in the first place?

In regard to cholecystectomy or cholecystostomy, I think there are certain cases that should have a cholecystectomy. If a gallbladder is badly damaged to the point where it will not return to its normal condition, I think that is the proper thing to do. However, in other conditions, say in pancreatitis and the other things Doctor Young mentions, cholecystostomy should be done.

I think it would be just as sensible to say that you amputate every arm that is infected as to say that you should amputate every gallbladder that is infected.

DR. M. E. KLINGLER (Garrett): I would like to take issue with the last statement, because I think it is unproven that a newly formed gallbladder is not a better gallbladder than Nature gave us. The old gallbladder is a reservoir for stagnant bile that will stay there for days at a time, while the new gallbladder, which is readily formed out of the hepatic and common duct, is the right kind. The bile enters at one end and

goes out at the other, and is therefore renewed many times daily.

DR. WILLIAM H. WILLIAMS (Lebanon): I agree with the method mentioned for approaching the gallbladder in those cases that have adhesions. I think it is the most reasonable plan and I think most of us will agree as to that. We all seem to like the gallbladder—we want to get it into our fingers, but somehow we do not agree exactly as to what to do after we get it. We all agree that some gallbladders should be removed and some should not, but we have not quite come to the place where we agree as to which one should be left in and which one taken out. The method of removing is not of so much importance, but the thing we need to settle is—which gallbladder shall be removed and which one left. Of course each individual case is a case unto itself, but it occurs to me that if a gallbladder is sick enough to give distinct gallbladder symptoms, symptoms pronounced and severe, it should, in a large percentage of cases, be removed.

DR. M. A. AUSTIN (Anderson): As far as making an absolute rule as to which gallbladders are to be removed and which left, I do not believe it will ever be definitely settled by the surgeons. Not long since in Doctor Ochsner's clinic in Chicago I heard him say that he had seen three times as many cases of after disturbance following cholecystectomy as in those where a simple cholecystostomy had been performed. However, I think the question of removal of the gallbladder should be dependent upon the surgeon's skill and experience.

One fact I have found to be constant, that as surgeons we have failed in our duty to these cases after we have operated on them. These patients are sick, they have a sick liver as well as a sick gallbladder, and simply removing stones from the bladder or removing the bladder itself does not get these patients well. The last issue of the Mayos' book states that in a series of 3,000 gallbladder cases they made sections of the liver in every case, and in 85 percent of these cases there was infection of the liver. If we neglect this liver condition after our patients are operated on, we are going to have a number of recurrences of many symptoms because of the liver condition. In all of these liver cases that I have had the privilege of operating and observing I tell them that the operation is simply the beginning of their getting well. They will be all right in a couple of years' time, provided they keep the liver cleaned out.

I feel that liver drainage or visceral drainage is an absolutely necessary factor after all of these cases, and without it we will have an unusually large number of recurrences, no matter whether the gallbladder is removed or not.

DR. SIMON J. YOUNG (closing): My paper was not so much an exposition of gallbladder

surgery as an argument—an argument for sanity as distinguished from the other extreme. I do not believe gallbladders should be routinely excised. My rule is to drain those which in my judgment will recover. That is all there is to it—those which in my judgment will recover—and the surgeon's judgment is what he must rely upon—judgment based upon knowledge and experience.

This discussion emphasizes the necessity for

such a paper, however imperfect it may be. We should pursue a safe and sane course, according to our best judgment, until statistics and experience prove to us that a more radical procedure is necessary. That was my reason for presenting this paper—the fact that the literature is full of such articles. The very last number of *Surgery, Gynecology and Obstetrics* contains a plea for general excision of gallbladders. I do not believe in it.

FURTHER EXPERIENCES WITH PHENOBARBITAL (LUMINAL) IN EPILEPSY

An experience with 200 cases of epilepsy has convinced Julius Grinker, Chicago (*Journal A. M. A.*, Sept. 2, 1922), that phenobarbital is the most effective symptomatic remedy in the management of epilepsy. The best results are obtained in the convulsive types of the disease—both grand mal and petit mal, with effects that are almost specific. The sensory and psychic forms of epilepsy are greatly benefited, if not by cessation then by reduction of seizures. There has been no mental deterioration from the administration of phenobarbital; on the contrary, patients have become more alert and keen, have lost their unnatural reticence and the fatuous, acne-marked facial expression previously the sign of an epileptic. Phenobarbital, when taken over many years, neither causes damage to the viscera nor results in habit formation. Large doses are mainly responsible for the so-called toxic and by-effects. The art of administering phenobarbital consists in finding a dose suitable to each patient without the production of unpleasant by-effects. One should begin with average doses of from $1\frac{1}{2}$ to 2 grains (0.1 to 0.13 gm.) of phenobarbital daily, and "feel" his way up or down the scale until results are obtained. Large doses should not be resorted to unless the smaller ones prove ineffective; and even then there should be a gradual return to smaller doses. An indiscriminate use of phenobarbital is fraught with danger and is certain to bring discredit on the most valuable anti-epileptic remedy in our therapeutic armamentarium.

RESULTS IN FOOD ANAPHYLAXIS OBTAINED BY CUTANEOUS AND INTRACUTANEOUS METHODS

It would appear from the study made by Albert Strickler, Philadelphia (*Journal A. M. A.*, Sept. 2, 1922), that there is little difference between the results obtained in food anaphylaxis whether the cutaneous or intracutaneous methods are employed. Fifty-eight subjects, on each of whom approximately six different proteins were utilized, were observed. The differences noted were very slight. Stress is placed on the

fact that practically in no instance were the differences noted of a high degree of positiveness. It seems suggestive that the arsenical preparations, whether administered by mouth or intravenously, do not materially influence the endermic food tests.

TUMORS OF THE BREAST

William D. Haggard and Henry L. Douglass, Nashville, Tenn. (*Journal A. M. A.*, Feb. 17, 1923), have collected, from their clinic, for the eleven years ending Jan. 1, 1922, 255 histories of breast lesions. The findings in these 255 cases may be summarized thus: (1) No malignant tumor of the breast occurred in a woman under 27. (2) The average age of patients with cancer of the breast was 49.2 years. (3) In cases of recurrent carcinoma, the patients were five years younger than in the primary cases. (4) All sarcomas occurred in males, and constituted 2.4 per cent. of the malignant cases. (5) In only one-third of the malignant cases was there a family history of cancer. (6) In two-thirds of the cases in which the lesions were benign, the patients gave a positive family history for cancer which probably caused them to apply for examination even though their lesions were benign. (7) The average duration of cancer before operation was twenty-six and one-half months. (8) One case in five was inoperable. (9) Patients with benign lesions had an average age of 36.1 years, which was thirteen years younger than in the malignant cases. (10) The average duration was fourteen months, as against twenty-six and eight-tenths months for carcinoma cases. (11) From five to ten year cured in 111 traced cases of operations for cancer of the breast occurred in 45.7 per cent. (12) The preventable surgical mortality was 0.8 per cent.

An old lady describing the symptoms of her ailment to a noted but eccentric physician, said: "The trouble, doctor, is that I can neither lay nor set."

Whereupon the good old doctor answered her thus: "Then, madam, I would respectfully suggest the propriety of your roosting."—Judge.

**THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION**

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

Office of Publication, 406 W. Berry St., Ft. Wayne, Ind.

FEBRUARY 15, 1923

EDITORIALS

**STANDARDIZING MEDICAL
LABORATORIES**

One of the most valuable aids to the successful practice of medicine is the medical laboratory, though in many instances it fails in its mission, not because it could not be of inestimable service but as a result of untrustworthy work its results are misleading if not disastrous. The fault rests with the medical profession in general and the surgeons in particular, for if due attention is given the question of training and experience of the laboratory worker, there would be little cause for complaint concerning the trustworthiness of the findings and aid given the physician or the specialist in arriving at intelligent conclusions concerning diagnosis and treatment. Many times as much or more depends on the result of the laboratory findings as on the work of the internist or surgeon, and yet oftentimes the internist or surgeon seems to be content with the work of the merest tyro, perhaps a so-called technician with a few months' training, or an intern or a recent graduate who, as commonly done, uses the theoretical knowledge he gained in school to do a little laboratory work as a stepping stone to general practice. One noted surgeon, who ought to have a respect for education, training and experience, has been credited with the statement that his laboratory work is worth just what he can have it done for, meaning of course, that he does not recognize that there is any grade of proficiency and that he is quite as willing to accept mediocre work as he is to accept the work of the most competent laboratory workers in the country. It has been this attitude that has cheapened the job of the real laboratory man and made him solicit work through the medium of advertisements, price lists, cut rates, and, unfortunately, occasionally more or less glaring declarations of unusual qualifications.

Another thing which makes it difficult for the legitimate and trustworthy medical laboratory to survive is the competition by State laboratories. Primarily, State laboratories were established for public health service, but they are used mainly by the doctors for laboratory work of a

private nature on private patients, the work being done for nothing at the State's expense, and in many instances the doctors are encouraged to do this by political public health officials. All too often unscrupulous doctors collect fees from patients for this State laboratory work that is done gratuitously, and aside from the fact that the work may be done by undergraduates and poorly trained laboratory workers, and therefore may not be especially trustworthy, yet the abuse is one that is growing and hurts the independent laboratory workers who, while not objecting to State laboratories created and conducted in connection with public health work or in the interests of charity, have a right to object to the unfair competition and the aid given to unscrupulous doctors.

It is this state of affairs that has degraded and belittled a branch of medicine, a specialty, which for good work requires as much real knowledge as any other branch of medicine. It is not surprising therefore that good medical men who otherwise might take up laboratory work are choosing other specialties, and that those doctors who are making a specialty of laboratory work are adopting unusual methods for successful livelihood. It is high time that the medical profession awakens to the value of good laboratory men and supports their efforts to furnish trustworthy and dependable services. In passing, it may be noted that the laboratory men themselves, in an effort to increase their efficiency, within the past year have put forth an effort to raise the standards of laboratory work as a specialty, first by controlling the advertising and eliminating as far as possible inefficiency, and, secondly, by educating the medical profession to realize the advantage of laboratory work well done. To this end the American Society of Clinical Pathologists was formed at St. Louis last May, the membership of which is limited to graduates in medicine who have devoted at least three years to clinical pathology and who devote all or a major portion of their time to this branch of medicine. The purpose of this society is to eliminate bad advertising, to elevate the scientific and professional status of the man specializing in this branch of medicine, and to encourage closer cooperation between the practitioner and the clinical pathologist. The standards proposed are that the laboratory director must be a graduate of medicine who has made a specialty of clinical pathology and who can act as a consultant to men who depend upon him for laboratory work. His work therefore should not be limited to barely giving a formula as he finds it in a test tube or microscope, but he should be given freely of clinical data, and his opinions from a laboratory standpoint freely given to his consultant, the clinician. Interpretations of

all laboratory work should be made only by doctors of medicine, and the equipment of an acceptable laboratory should be such that any technical laboratory procedure can be carried out.

The further aim of the American Society of Clinical Pathologists is to standardize and make uniform all important laboratory procedures. In this connection an endeavor will be made at once to standardize the much criticized Wassermann test. This all important test, done differently and reported differently by various laboratories, has led to much confusion. Dr. Kolmer, of the Dermatological Institute of Philadelphia, has, under the auspices of the American Society of Clinical Pathologists, introduced a standard technic which bids fair to remove much of the criticism of the Wassermann test. If this test is adopted by laboratories all over the country, the plus and minus marks of different laboratories will begin to mean the same thing. Kolmer's technic does not simplify the Wassermann test, but rather makes it more complicated. Simplification of a laboratory procedure is very desirable if compatible with accuracy, but if a more complicated technic gives more accurate results then by all means let the laboratory worker spare no pains to make his work accurate. Any complicated technic, however, should be simple to the laboratory worker who knows his business, so the tyro or technician's complaint that Kolmer's technic is too complicated only proves that he or she is not competent to make Wassermann tests of any kind. Recently simple precipitin tests have been advocated by Kahn and others as rivaling the Wassermann test, but some laboratory workers say that experience already has shown that precipitin tests only give positive reactions in about eight percent of four-plus Wassermans and are much less accurate in weaker Wassermann reactions. It can be seen, therefore, that as the Wassermann test has been only eighty to ninety percent accurate, at its best, a precipitin test which is only eighty percent as accurate as the Wassermann test cannot even be used as a check against the Wassermann test.

It is interesting to note that the American College of Surgeons also is working upon a plan to improve the standard of laboratory service and has given especial attention to the question of standardizing the Wassermann technic. Let us then encourage this movement for better trained laboratory workers and more efficient laboratory tests, even if the expense is greater, for the medical profession has had its fill of inferior work with all of the disappointments and failures that have accompanied it.

FIXING REQUIREMENTS FOR SPECIALISTS

While this is an era of specialism, and specialists in the practice of medicine are very essential for the intelligent diagnosis and treatment of many disease conditions of the human body, yet we must admit that there are a great many pseudo specialists who are a discredit to the medical profession and do great harm to patients through the sins of both omission and commission. So many of the younger physicians as well as older physicians in general practice have an idea that in order to succeed economically it is necessary to adopt a specialty and, in consequence, there is no city and scarcely a good sized town, that does not have its surgeons, pediatricians, neurologists, ophthalmologists, and representatives of the other medical specialties. This would be a good thing if all of these men who are posing as specialists were properly educated, trained and had experience along the special lines included in the specialty selected. The trouble of it is the vast majority of these so-called specialists have not been adequately trained and, worse than all, many of them do not seem to recognize their limitations and inefficiency and they make no effort to improve themselves by observation, reading or study. No where is this more noticeable than in the practice of general surgery. Nowadays almost every general physician, whether he lives in the city or in a crossroads village, thinks he is quite capable of removing appendices, gall-bladders, uteri, and, in fact, doing any of the surgical operations from Caesarian section down to the amputation of a finger; and as a direct result of this false assumption of the prerogatives of an educated and well trained surgeon the medical profession suffers in reputation and the public loses health and even life as a direct result of misplaced confidence.

What is true of general surgical practice is also true of the other specialties. For instance, eye, ear, nose and throat specialists are, figuratively speaking, as thick as hair on a dog's back, and it is a safe bet that not 25 per cent. of them have had anything more than the most superficial training, while many of them have had no training at all but have "picked it up." In consequence the patient who is suffering from deafness, quite generally is treated by Politzerization without being subjected to even the most elementary functional tests in order to determine whether the impaired hearing is due to a disease of the sound conducting or the sound perceiving apparatus. Obstructed breathing is treated by a slaughter of the turbinates, and the unfortunate patient who is losing vision from simple glaucoma is all too frequently treated for any one of

several conditions that have no particular resemblance to glaucoma, or perhaps the luckless patient suffering from simple glaucoma is told that a cataract is forming, no treatment is indicated and that later on an operation will restore vision.

The solution of this problem is the adoption of a minimum standard of requirements for all those who desire to pose as specialists in any particular branch or branches of medical or surgical practice. The American College of Surgeons has done much toward the establishment of a standard for the practice of the various surgical specialties, and while we are convinced that some men possessing limited qualifications hold a certificate from the American College of Surgeons, yet the fact that these men have had *some* training and experience in the specialty they are following, and that their relative competency has been passed upon is far better than to permit medical men with less training and experience to even pose as specialists. The American Board for Ophthalmic Examination has been rather rigid in its rules for determining the qualifications of ophthalmologists and granting certificates attesting qualifications. This has been the means of stimulating a large number of men to so qualify themselves that they can meet the requirements of the Board, and it gives the rank and file of the general medical profession an opportunity of determining "who's who" in ophthalmology if the trouble is taken to consult our directories and find out who possesses the certificate of the Board. What has been done by the ophthalmologists soon will be done by the otolaryngologists who propose to create and maintain a Board analogous to the Board for Ophthalmic Examinations. The American College of Physicians is another institution, analogous to the American College of Surgeons, which aims to determine and pass upon the qualifications of internists and which grants a certificate to those who qualify.

All of these agencies for the improvement of the standard of specialism are working in the right direction and deserve encouragement. The lamentable fact remains that complying with the requirements of these organizations is purely a voluntary matter on the part of physicians, and the pathetic side of the situation is that no effort is made to acquaint the public with the existence of these organizations, their aims and objects, so that the public may select their specialists intelligently. We oftentimes wonder that the public has any confidence in the medical profession when we note the bad, even criminally negligent and ignorant, work that is done in the name of the practice of medicine. However, we have no one to blame but ourselves, for it is up to us to let the public know that we do not sanction in-

competency any more than we sanction dishonesty, and that we have created within our profession a standard of qualifications and efficiency for all those who pose as specialists and that we desire the public to be acquainted with that fact. On the other hand, the public has a right to demand that a standard of efficiency as a specialist shall be maintained, and that the standard should be far in excess of that demanded by the general practitioner of medicine. It should require prescribed education, training of a definite amount and specified character, and a certain amount of experience. Any "Who's Who" directories of the American College of Surgeons, the American College of Physicians, the Board of Ophthalmic Examinations, or the Board for Otolaryngological Examinations should be open to the public, and the public should be asked to consult those records if intelligence is to be displayed in the selection of specialists.

ABOLISH SMALLPOX QUARANTINE

The purpose of maintaining quarantine in the presence of an infectious disease is to prevent its contraction by people in the vicinity of the patient and its transmission to others at a distance. The methods of obtaining this result are often elaborate and burdensome. It entails labor and inconvenience, as well as material expenditure of money. If the burden of this procedure could be eliminated, much advantage would accrue to all concerned.

Smallpox is the outstanding communicable disease which can be prevented and avoided by means of vaccination. There is no danger of people contracting this disease who have been recently successfully vaccinated, and there is no reason in these days for its existence. Those people who oppose vaccination and claim they would prefer to have smallpox should be granted the privilege of contracting the disease. They also should be given the opportunity of bearing the labor and expense of its treatment and thus relieve the public of this wholly unnecessary burden. There is no reason why such cases should not be treated in their own homes the same as any other disease which people care for and attend with impunity. Such a procedure would be one of the most effective means for the eradication of smallpox.

These views are illustrated by the present epidemic in Denver, where on a given date 267 cases had been reported. Of these 195 had never been vaccinated. There were 74 deaths, 67 of which were from the unvaccinated. The remaining seven had not been vaccinated for periods from fifteen to seventy years. About half of these cases were treated in their own homes. When this epidemic became well established there was probably a stampede on the

part of Christian Scientists and other anti-vaccinationists to obtain vaccination for themselves and families, as commonly occurs under these circumstances. There is every reason to expect similar epidemics in all of our large cities in the near future, since a generation of unvaccinated people exists throughout our land. Compulsory vaccination has been abolished in many of our states and it is certainly illogical under these circumstances to maintain enforced quarantine. Let us abolish the quarantine against smallpox. — *Northwest Medicine*, December, 1922.

INCOME TAX PROVISIONS FOR DOCTORS

On or before March 15 every doctor must file an income tax return at the nearest internal revenue office. This return must give the gross income for the year 1922, and the deductions allowable under the income tax rulings. The law requires that an accurate account must be kept of all income from whatever source, and suitable records must be kept to verify the report. Nearly all doctors are familiar with the items that are exempt from the tax but not all doctors are familiar with the subject of allowable deductions, and consequently we reproduce from a revised digest of the income tax laws, as applied to doctors, the following:

Deductions: All the ordinary and necessary expenses paid or incurred during the taxable year in carrying on the business are deductible, such as:

Office supplies, including postage, stationery, record books, etc. Typewriters, adding machines and items of like nature are not deductible as an office expense.

Telephone, telegrams, light, water, fuel, surgical dressings and sutures, and such instruments the life of which is less than a year, and of a temporary nature.

Drugs, optical goods, dental supplies, roentgen plates and other breakable material.

Amounts paid for labor necessary for the prosecution of the business, such as office girl and assistant, janitor service, and chauffeur.

Professional assistants, x-ray and laboratory fees when such fees have been collected from patients and entered as gross income. Medical Journals (not medical books) and dues in Medical Societies.

Gasoline, oil, tires and repairs for automobile necessary to and used in business.

Indemnity insurance and insurance on office equipment.

Rent or other payments required to be made as a condition to the continued use or profession for the purpose of the business, of property to which the taxpayer has no title or in which he has no equity.

Interest, interest paid on money borrowed and invested in tax free securities is not deductible.

All taxes are deductible, except income tax, war profits and excess profits, and taxes paid for local improvements such as paving, sewer, sidewalk, curb and guttering, and paving on public highways.

Losses sustained during the taxable year and not compensated for by insurance or otherwise, if incurred in business or trade or if incurred in any transaction entered into for profit, though not connected with the business.

Losses sustained on property not connected with business, if arising from fire, storms or other casualty, or from theft, and if not compensated for by insurance or otherwise.

Debts ascertained to be worthless and charged off within the taxable year, if you are reporting on the accrual basis. If you are reporting on the cash basis, then no credit is given for bad debts.

Contributions made to corporations or other organizations organized and operated exclusively for religious, charitable, scientific or educational purposes, no part of the net earnings goes to private stockholders or individuals. Such contributions are limited to 15 percent of the taxpayers' net income as computed without the benefit of this section.

Traveling expenses, including the entire amount expended for meals and lodging while away from home on business.

Items Not Deductible: Personal living or family expenses.

Amounts paid for new buildings or for permanent improvement or betterments made to increase the value of any property or estate. An automobile purchased to be used exclusively for business is not a deductible expense.

Amounts expended in restoring property or in making good the exhaustion thereof for which an allowance is or has been made.

Premiums paid on any life insurance policy covering the life of any officer or employee or any person financially interested in any business carried on by the taxpayer when the taxpayer is directly or indirectly a beneficiary under such policy.

Post graduate expenses.

Amounts expended by a physician, dentist, etc., for railroad and Pullman fares and hotel bills in attending a medical convention are *not* ordinary and necessary expenses incurred in the pursuit of his profession, *and do not constitute allowable deductions in his return*. Reference. 1-26-369 I. T. 1369, Sec. 214 (a) Revenue Act of 1921.

Interest on money borrowed and invested in tax free securities.

Things to Be Remembered: "Net Income" is gross income, less certain deductions. The

fact that allowable deductions from gross income, for business expenses, losses, etc., may reduce the net income to an amount below the personal exemption of \$1,000 or \$2,000, does not alter the requirement to file a return of gross income, if such gross income equalled or exceeded \$5,000. If the net income is over \$1,000 or \$2,000 as the case may be, but under the amount of the personal exemption of the taxpayer, a return must be filed.

The status of the taxpayer on the last day of the taxable year determines the amount of his personal exemption. The fact that he was married or single during the greater part of the year does not affect his exemption.

The law makes it compulsory for the taxpayer to furnish information to the Government upon Form 1099 of all salaries, rents, etc., paid by the taxpayer to individuals, partnerships, etc., in amounts of \$1,000 or over. The law provides a penalty of \$1,000 for failure to comply with this section.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in **THE JOURNAL**, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask **THE JOURNAL** about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want **THE JOURNAL** to serve YOU.

THE cartoonists are heaping ridicule upon Coue in an adroit manner and that means the death of Coueism unless the newspapers keep it alive through sensational propaganda. Probably the next thing we hear will be that medical men are responsible for the cartoonists' activity.

EVERY doctor in Indiana should subscribe for *Hygeia*, the new journal for the lay public, published by the American Medical Association. The introductory subscription is one dollar for members of the medical profession, and the enterprise deserves the support of the medical profession in order to make it a success.

SOME doctors are delinquent in the payment of dues to the State Association purely and alone because some negligent county medical society secretary has failed to report and remit dues received. Such negligence is inexcusable and those who are suffering the effects have no one

to blame if they select such a secretary to represent and be responsible for them.

For the last two issues of **THE JOURNAL** we have been asking the question, "Have you paid your medical society dues?" Perhaps it is apropos now to ask the question, "Have you filed your income tax report and paid the first installment?" If not you ought to get busy, for Uncle Sam shows no leniency to the procrastinator and March fifteenth is the fatal day.

THE osteopaths have a bill in the present Indiana legislature which, if passed, will permit them to use anesthetics, anodynes and antiseptics. The bill already has passed the House. It is merely a short cut to practicing medicine in any way. The osteopaths already have been doing everything that this new bill provides for, and then some. What is true of the osteopaths is true of every other cult that is attempting to relieve the sick. Why have any medical law?

It is decidedly inconsistent to place any of the federal public health activities in charge of the United States Department of Labor, and yet that is exactly what has been done. It is another evidence of what politics rather than common sense will do. We are reminded that retiring Senator New of Indiana is quite correct when he is reputed to have said that the representation in Congress is getting more and more mixed as pertains to rational ideas on any subject, and there is no telling what the present Congress may do in adding to the incongruities in legislation of the past.

SECRETARY COMBS advises us that a large percentage of the doctors who are members of the Indiana State Medical Association have paid their dues for 1923, but that there are many members still in arrears, some of them counted as leaders in their respective communities and who ought to set a better example. However, on the whole, conditions are improving and doctors for the most part are beginning to realize that the careless, slipshod business methods of the past will not do for the present if their own interests are to be protected and if the good opinion of the public is to be retained.

WE frequently receive news notes, personals and notices concerning meetings of county or district medical societies which are sent in but arrive too late for publication in the current issue of **THE JOURNAL**. In this connection we desire to announce again that it is only exceptionally that we can get short items in the current issue of **THE JOURNAL** if they arrive as late as the fifth of the month, as all the regular copy goes to the printers much before that date. Furthermore, it is a waste of space to

publish announcements of meetings that are to be held upon a date that is near the fifteenth of the month which is the date when THE JOURNAL is supposed to come from press.

NEWSPAPERS forever are looking for sensational news, and this is true of some newspapers more than others. A reputed new discovery concerning any phase of medicine and surgery is heralded in bold-faced type and the story well embellished, whether the facts substantiate it or not. Recently the public press has had an account of the grafting of a pig's eye upon a sightless boy, on the presumption that vision would be restored in that way. No doubt many gullible people believed the absurd and irrational story. The progress of scientific medicine is injured by such wild and fanciful tales and it is unfortunate that the public press is not more particular in determining facts before making any startling announcements concerning medical or surgical discoveries.

DR. SIMON FLENNER, director of the Rockefeller Institute, now claims that he is not responsible for the distorted newspaper announcement concerning the discovery of the causative agent of epidemic influenza. He merely recapitulated the results as recorded in the *Journal of Experimental Medicine*, and in commenting upon the subject in *The Journal of the American Medical Association*, says that the organism under consideration, which has been isolated from the noses and throats of patients with influenza, cannot be said to have been shown conclusively to have been the cause of the condition known as epidemic influenza. "The need of authoritative sources of information for the public on the new medical discoveries was never so great as at the present time."

INDIANA, like many other states, is now suffering from a mild secondary wave of epidemic influenza. Like the disease as it appears in other localities, the symptoms are milder and complications are less numerous and less severe. There are, however, some cases of bronchitis of mild type, and pneumonia occasionally occurs, particularly in the aged and those who have a very decidedly lowered resisting power. Very naturally the usual precautions should be carried out in limiting the spread of the disease as also in treating actual cases of it. The patient should be put to bed in a warm but well ventilated room. Eliminative treatment and liquid diet is advisable. Complications may be avoided by keeping the patient in bed for several days after he feels perfectly well.

IN the Correspondence column of this number of THE JOURNAL we publish a letter directed to the State Board of Health complaining

about the injustice of free laboratory service by the State to those able to pay. The matter has been referred to before but is of sufficient importance to justify serious attention. Unless we are misinformed the bacteriological and pathological laboratories of the Indiana State Board of Health regularly make examinations of various kinds in cases for which a fee should be paid to someone for the services. Aside from the fact that this practice takes work from the private laboratories which should not be compelled to enter into competition with the State, it is an injustice to those persons who receive the services, if able to pay, because it tends to pauperize the persons receiving such services and causes them to lose their self-respect which is such a valuable asset in the morale of every community. As we often have stated we have no objection to the State caring in every possible way for the indigent sick, but we do object to the practice of furnishing free services at public expense to those able to pay. Therefore, we are quite in sympathy with the resolutions presented to the State Board of Health for consideration, and we sincerely hope that something will be done to put a stop to the practices of which complaint is made.

IN Indiana medical laws mean little and have little force. Probably Indiana is no worse than some other states, but here at home our attention is called to the matter because there is sufficient evidence to indicate that almost anyone masquerading under the name of a cult can treat the sick and suffering and be unmolested. He can do surgical operations or he can prescribe drugs. In fact, he can do anything on the plea that it will relieve the sick, and he will be undisturbed so far as the law is concerned. If, perchance, he is arrested for practicing medicine without legal permission, a benevolent jury acquits him. Under the circumstances why have any medical laws, for if laws cannot be enforced, and if the enforcement depends upon public sentiment, which seems opposed to enforcing them, then it would be well to wipe out the laws. We are strongly of the opinion that the sane and sensible thing to do is to strike from our statute books all legislation concerning the practice of medicine, for when it comes right down to facts, medical men are about the only ones that ever have advocated any legislation governing the practice of medicine, and medical laws are to protect the people rather than protect the medical profession, so why not let the people who do not seem to be in favor of medical laws or their enforcement have their way, and if they pay the penalty perhaps a better condition of affairs eventually will result.

IN this number of THE JOURNAL we publish a letter from the Secretary of the Indiana State

Board of Health concerning the matter of free service rendered by the State Laboratories, and in perusing the letter we can not help feeling that Dr. King is quite correct when he says that physicians must accept some of the responsibility if the State laboratories are working an injustice through the free service that is being rendered. We confess that we have ample evidence to justify the statement that our profession has within its ranks any number of men who are willing to sacrifice honesty, fair dealing, and the ethics of our profession on the altar of commercial gain. It is not a far-fetched argument to say that if medical men will exploit the State Laboratories for their own commercial advancement that they also will continue to do so under any arrangement that may be made by which a signed statement is obtained from them to the effect that the services are being rendered to indigent patients. In other words, as Dr. King points out, if doctors can not be trusted in one respect they can not be trusted in another. The whole question then simmers down to one of an uplift of the morale of the profession, and when we consider this subject we must note the general tendency to condone offences or refuse to censor the questionable acts of our medical men. When we get to the point where we have the moral stamina to enforce the ordinary rules of honesty and decency in the practice of our profession we will have less trouble in securing that which is due us as benefactors of mankind.

EVERY editor's mail is cluttered with circulars and pamphlets of various kinds, to say nothing of letters from individuals, societies and institutions, asking for publicity or donations for this or that individual or enterprise. We cannot avoid the conclusion that much of the enormous amount of money that is spent in this propaganda must be considered wasted, and when it comes to a consideration of the various uplift enterprises of one kind or another the money certainly is wasted if we take into consideration the duplication that occurs. For instance, if all of the numerous national societies pertaining to various phases of public health or welfare work could be consolidated or their activities coordinated, what a vast saving in money would result! Sometimes we feel that many of these organizations are inaugurated and maintained for the special benefit of a few or several persons who are profiting through it by being given vocations as managers, directors, or field workers for the enterprise. Really, some of these enterprises have no vital reason for their existence, and their activities could well be absorbed by other organizations of more value and more potentiality. Notwithstanding this, the more or less useless organizations continue to send out their appeals for financial aid, and not entirely

without success. It is unfortunate that the activities of all of these organizations that are allied in their aims cannot be consolidated to the end that economy and efficiency will be greater. There also is a crying need for the suppression of a lot of uplift work that is born of maudlin sympathy or is created with ulterior motives in view and masked by the cloak of benevolence, charity or social uplift.

In a communication to the medical profession the secretary of the State Board of Health says: "It is, of course, superfluous to state that the universal use of toxin-antitoxin would virtually eradicate diphtheria. But this being a comparatively recent scientific achievement, we find there is some confusion, especially in cases where antitoxin has been used. As this confusion and resultant errors may, in the cases and communities where they occur, lead to unjust discredit of toxin-antitoxin, a word of caution is in order.

"Rightly used the immunity acquired by toxin-antitoxin is practically permanent, *i. e.*, it lasts long enough to protect the subject through the susceptible period of life, and during which time a natural immunity is ordinarily being created. But it is of utmost importance to keep in mind the fact that the effect of toxin-antitoxin is *nil* upon an already immune person. On account of its quick effect, immunizing doses of antitoxin are frequently used in cases of direct exposure. This is effective in a few hours, but the immunity lasts only a short time—from a week or ten days to a month or longer. While this immunity lasts toxin-antitoxin is non-effective. Therefore, in all cases where antitoxin has been used, toxin-antitoxin should not be used until there has been a return of susceptibility, which means a matter of two weeks or longer. Errors here with a false sense of security and a later development of diphtheria would cause an unfair criticism of the efficacy of toxin-antitoxin. The immunity due to antitoxin is of the passive variety, while toxin-antitoxin causes the subject to build an active immunity, but it will not do this on any but susceptible subjects."

THE medical bill failed to pass the House of the present Indiana legislature by one vote. By this we mean that the bill which would amend the present medical law carried with it an injunction provision and it was this clause that was defeated, thus putting the matter back where it has been for several years, which means that we have little better than no law. We now are interested in noting what becomes of the separate bills offered by the chiropractors, the eclectics, the podalists and the embalmers. Briefly stated, the chiropractors want recognition and a board of their own. The

osteopaths, not satisfied with the present recognition, desire to extend the legal permit so that they can practice surgery and administer narcotics and anesthetics, and use antiseptics. The podalists want a law which recognizes foot specialists, and the embalmers want to have a law recognizing their profession and requiring examination and registration. In passing, it may be noted that if the osteopaths gain their point they might as well be given full privileges, as pertains to the use of drugs, even though they do not pretend to study materia medica and therapeutics, and if this privilege is given to the osteopaths it might as well be given to the chiropractors. We always have maintained that the legal recognition of any of the pseudo-medical cults, with their limited education, training and experience, meant giving them a short route to all of the privileges accorded the regular practitioners of medicine, and we are more convinced than ever that this opinion is correct. Evidently the people are more and more inclined to show disrespect for education and training, as well as authority, and this pertains not only to the practice of the healing art but almost everything else. Well may we say, "Whither are we drifting?"

THE Bureau of Information, recently established by the Indiana State Medical Association with Dr. Hurty at its head, has wonderful possibilities ahead of it in connection with the education of the public concerning the aims and objects of the medical profession. Recently Dr. Hurty has been editing a medical column in one of the leading newspapers of the State, an arrangement that was entirely private and had no connection with the Indiana State Medical Association. One of the prominent medical societies of the State has seen fit to criticize Dr. Hurty for some of the statements made in that column, and while we do not feel disposed to find fault because Dr. Hurty's public utterances are not thoroughly approved, yet we do say that medical men should not be hypercritical as to the means and measures adopted for educating the public concerning medical questions as long as there is honesty of intent and purpose, and the general principles enunciated are correct. It always has been the carping criticism of medical men toward each other and each other's views that has interfered with a progress that might have been ours in creating a better opinion of the public concerning us. In connection with the episode to which reference is made, we ask every member of the Association to read the letter of the Chairman of the Legislative Committee, and incidentally the Chairman of the Committee on the Bureau of Information, published in this number of THE JOURNAL, concerning the educational policy of our Association and what is expected of

our newly created enterprise. This letter will be followed by others touching upon the work of the Bureau of Information, and in the interest of progress we ask that unfriendly criticism be withheld until the profession can see what is being accomplished. Constructive criticism and suggestions for the betterment of the project will be welcomed by the committee.

WE shall breathe a sigh of relief when the Indiana legislature adjourns. While a few really mentally well-balanced and honest men may be found in our legislature yet for the most part the would-be statesmen found there are of the "small bore" variety acting in response to political expediency or, because of their actions, giving strong presumptive evidence that their influence and votes are dependent upon personal aggrandisement. A good man has to be a pure patriot if he accepts a position as one of the law makers in our State legislature and, unfortunately, patriots are few and far between in times of peace. To the doctor the question of enacting wise legislation pertaining to public health and the practice of medicine is of greatest importance, and he wonders why our State legislators fail to listen to either justice or reason when these subjects are under consideration. If he but stops to think of the fact that the rational consideration of any subject need not necessarily be expected of a legislature made up as it is of "misfits," and that politics and the most sinister motives in which the average medical man takes no part guides the majority of legislatures, the answer to the question is clear. Therefore, as we often have said, to accomplish anything in the legislature it is necessary to play the game as others play it with the exception of the introduction of dishonesty or graft. It is possible to bring influence to bear, and good influence is two to one better than bad influence. In these closing days of the legislature a good deal of last minute legislation is bound to be enacted, and unless the medical profession is on guard it is possible that some bills that are detrimental to highest ideals of public health and medical practice will slip through our legislature. Therefore, each and every medical man in the State should, through himself as well as through his friends, make his influence felt among the legislators from his particular district, to the end that iniquitous or freak legislation may be prevented.

It is a strange thing that many medical men do not seem to see the trend of affairs as it pertains to the growth of the socializing of medicine. We are beginning to realize the dangers of the free service offered by hospitals and clinics supported by federal, state or municipal

taxation, to say nothing of the free service given by various charitable or benevolent institutions, and we know that the scope of the public health service is branching out so that it more and more includes the work now done by the private practitioner of medicine. We also have noted the tendency on the part of large corporations and industrial concerns to furnish medical and surgical services free or at a very nominal cost to their employees, and now we learn that a movement is on foot whereby some of the Boards of Education will furnish free medical and surgical services to the attendants in our public schools. It is well for the medical man as well as the public to heed the sign, "Stop, Look and Listen." This Utopian dream of the socialistically inclined, if brought to a reality, is bound to end disastrously. It is not alone the question of self-preservation that leads medical men to oppose the insidious growth of these socialistic tendencies or an abiding faith in the principle. The paternalistic form of government toward which we are drifting never has and never will prove successful. The greatest advances have been made through independent individual effort, and whenever you create dependency and take away the incentive to work you in a large measure destroy productivity and real progress. Everything that is done to advance the socializing of medicine has aided in fostering dependency, and a loss of self-respect on the part of our people, to say nothing of destroying that incentive which draws some of the best minds into the study and practice of a science that requires something more than the machine-like activity of a salaried employee. Let us have an expansion of our facilities for medical education, a broadening of the requirements for medical practice, and suitable protection of the public against incompetency and knavery by protecting us from any scheme that will destroy individualism.

THOSE doctors who are planning to attend this year's session of the American Medical Association, to be held in San Francisco, June 25 to 29, probably will be interested in knowing that several special tours to and from San Francisco are being arranged for their benefit and all are more or less attractive. There will be special trains going by different routes and groups of friends are arranging for special cars to be attached to these special trains. The advantage of joining one of these tours is that friends and acquaintances may be associated in making the trip, but the chief advantage lies in the fact that these special trains will stop at all of the more prominent scenic points both going and returning, and every arrangement will be perfected for the convenience and comfort of the party, both en route and at the various stops

that are made. Indiana doctors will be interested in knowing that an attempt will be made to have at least one Pullman, devoted entirely to Indiana doctors and their wives, attached to one of the special trains leaving Chicago. It would be well for those contemplating the trip and wishing to join the Indiana party to make their desires known. Some of the special trains will go by Denver, Salt Lake and Los Angeles, and thence to San Francisco, returning by Portland, Vancouver, and the scenic points on the Canadian Pacific to Minneapolis and thence to Chicago, while other trains will go from Chicago direct to Los Angeles by way of the Grand Canyon and return from San Francisco either by way of Salt Lake City and Denver or the more northern route by the Canadian Pacific. Probably everyone knows that it is impossible to take in all of the scenic points between Indiana and the Pacific Coast and, therefore, those who are contemplating the trip should make up their minds as to what they prefer to see and what they are willing to skip or leave for another time. So far as the Indiana car is concerned it will not be possible to suit all tastes, but an attempt will be made to select an itinerary that is not only attractive but agreeable to the majority of those who wish to join the party. Further particulars concerning the matter will be published in the March number of *THE JOURNAL*. In the meantime, those who are thinking about the trip and wish to join the Indiana party should write to Dr. Ralph S. Chappell, Terminal Building, Indianapolis, Indiana.

A LETTER to the State Board of Health concerning the iniquitous practice of furnishing free laboratory services by the State to those able to pay, the letter appearing in the Correspondence Department of this number of *THE JOURNAL*, only points out one of the insidious ways in which socialistic medicine is being foisted upon us. We have been trying to point out the dangers that threaten, and it looks as though the warnings are being heeded. Certainly it is time for every red-blooded medical man to take off his coat and work for the high ideals he represents, to say nothing of aiding in his own self-preservation. Socialistic medicine in any form is dangerous to the public. It leads to inefficiency and bureaucracy, aside from the fact that it tends to lead to pauperism and a loss of self-respect among a class of people who are already too willing to expect something for nothing and who form a growing army of discontents and trouble makers. Abuse of charity there always will be, and there always is justification for care of the indigent at federal, state or municipal expense, but there is no reason why the mantle of charity should be extended to those who do not deserve it. Furnishing free laboratory facilities at State expense has been a growing evil and we

are not entirely satisfied that the practice has not been sanctioned if not actually furthered by public health officers and politicians. It is time to put a stop to it, and to make the laboratories do what they are intended to do and no more, namely, furnish services to those unable to pay, and to aid in the solving of problems of public health. The damnable practice of some mercenary and dishonest doctors who charge their patients for services which have been performed gratuitously by State laboratories also should be suppressed. Furthermore, in connection with this whole subject of the socialization of medicine we want to protest against the policy of any of the hospitals under State control that maintain pay beds in their wards or pay rooms. We appreciate the fact that some of the expenses of operating hospitals under State control may be met by the income from pay patients, and this is notably true in the case of Long Hospital at Indianapolis, but we contend that no hospital under State control and kept up in whole or in part by taxation has a moral right to enter into competition with the private institutions of the State. The principle of the thing is wrong and it should be righted. What applies to the Long Hospital also applies with equal force to the Riley Memorial Hospital, but in the case of neither of the hospitals should there be a catering to the wants of those able to pay whether they are willing to pay or not. Any hospital under State control and kept up by taxation should be for the indigent and the indigent only. There are plenty of institutions kept up at private expense or at the expense of various organizations that offer adequate facilities and competent care for those able to pay. The medical profession has been charged with being narrow minded in its opposition to some of these enterprises, but the opposition is based upon a principle that no one can deny is just, fair and honorable, and we contend that it is just as necessary for the State to be fair and honorable in its dealing as it is for individuals to be fair and honorable.

DEATHS

CHARLES N. NOLAN, M.D., sixty years of age, died suddenly at Columbus, January 22. Dr. Nolan graduated from the Pulte Medical College, of Cincinnati, in 1884.

WILLIAM G. HOPKINS, M.D., of Fort Branch, died January 11, at the age of 79 years. Dr. Hopkins was a graduate of the Bellevue Hospital Medical College, New York, in 1882.

FRANK P. GRAY, M.D., died at his home in Lafayette, January 18, at the age of sixty-five years. Dr. Gray graduated from the College

of Physicians and Surgeons, Keokuk, Iowa, in 1876.

JOHN L. SMITH, M.D., retired practitioner, died at his home in Clarksburg, January 15, at the age of seventy years. Dr. Smith graduated from the Cincinnati College of Medicine and Surgery in 1877.

ODELL WEAVER, M.D., of Terre Haute, died at an Indianapolis hospital, December 26, at the age of forty-five years. Dr. Weaver graduated from the Vanderbilt University Medical Department, Nashville, Tennessee, in 1890.

MILTON C. WILSON, M.D., died at his home in Lafayette, January 14, aged seventy-one years. Dr. Wilson graduated from the Medical College of Indiana, Indianapolis, in 1882. He was a member of the Tippecanoe County Medical Society, the Indiana State Medical Association, and the American Medical Association.

JAMES D. HILLIS, M.D., of Lafayette, died January 4 at a sanatorium in Indianapolis. Dr. Hillis was sixty-nine years of age. He graduated from the University of Michigan Medical School, Ann Arbor, in 1880. Dr. Hillis was a member of the Tippecanoe County Medical Society, the Indiana State Medical Association and the American Medical Association.

CHARLES P. COOK, M.D., of New Albany, died at his home, January 8, as the result of a stroke of apoplexy. Dr. Cook was seventy years of age. He graduated from the Medical Department of the University of Louisville, Kentucky, in 1883. Dr. Cook was a member of the Floyd County Medical Society, the Indiana State Medical Association and was a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE St. Joseph County Medical Society held its first meeting of the year at South Bend, January 10.

DR. ARTHUR W. RECORDS, of Franklin, and Miss Edna W. Allred, of Union City, were married December 21.

BRONZE tablets in honor of medical services rendered by the late Drs. Albert Carl Kimberlin and Frank B. Wynn were unveiled January 14 at the Methodist Episcopal Hospital Indianapolis.

DR. F. H. HOUSE, formerly of Texas, has located in Pierceton for the practice of medicine and surgery with Dr. C. R. Long.

DR. FRANK W. FOXWORTHY, of Indianapolis, recently returned from a trip to South America, where he visited not only the west and east coasts but also went into the interior of Peru and Bolivia.

THE midwinter meeting of the Council of the Indiana State Medical Association was held at the Hotel Severin, Indianapolis, Friday, January 19. Dr. C. H. Good, of Huntington, president of the Council, presided.

THE Northeastern Indiana Academy of Medicine held a meeting at Gawthrop Inn, Kendallville, January 25. Dinner preceded the meeting. Dr. Don C. Sutton, of Chicago, presented a paper on "Pneumonia".

THE Annual Congress on Medical Education, Medical Licensure, Public Health and Hospitals will be held at the Congress Hotel, Chicago, March 5, 6, and 7, 1923. All those interested are invited to be present.

THE Huntington County Medical Society held a meeting at Huntington, January 9. Dr. Floyd B. Mitman, of Bippus, was given membership in the society. A paper on "Surgery of Accidents" was presented by Dr. R. S. Galbreath.

AT the regular January meeting of the Rush County Medical Society the following officers were elected for 1923: Dr. J. C. Sexton, president (re-elected); Dr. M. C. Sexton, vice-president, and Dr. John Lee, secretary-treasurer.

THROUGH error a news note in the January number of THE JOURNAL announced that Dr. Sidney J. Michel, of Evansville, had been elected president of the Ohio Valley Medical Association, whereas the name should have been Dr. Sidney J. Eichel.

DR. O. H. SMITH, head of the physics department of Cornell University, has been commissioned by the Rockefeller Foundation to assist the China medical board in reconstructing the pre-medical science courses of the government and private schools of China.

DR. JOHN W. SLUSS, of Indianapolis, was elected president of the Indianapolis Medical Society at the annual election held January 4. Other officers are: Dr. William F. Molt, first vice-president; Dr. Arthur Walters, second vice-president; Dr. W. A. Doeppers, secretary-treasurer.

THE Northeastern Indiana Academy of Medicine held a meeting at Gawthrop Inn, Kendallville, February 8. Dr. Herman Kretschmer, of Chicago, presented a paper on "Some of the Problems in the Diagnosis and Treatment of Kidney and Ureteral Stone."

DR. W. A. SPURGEON, of Muncie, has been re-elected president of the State Board of Medical Registration and Examination. Dr. E. M. Shanklin, Hammond, was made vice-president. Dr. W. T. Gott, Crawfordsville, secretary, and Dr. J. W. Bowers, Fort Wayne, treasurer.

THE Steuben County Medical Society held a meeting on Friday, January 5, at Angola. Papers were presented by Drs. Rhamy and Van Buskirk, of Fort Wayne. Officers elected for 1923 were as follows. Dr. B. A. Blosser, president; Dr. Will A. Waller, vice-president; Dr. Mary T. Ritter, secretary and treasurer.

THE annual session of the Indiana Academy of Ophthalmology and Otolaryngology was held in Indianapolis, January 18. Officers were elected as follows: Dr. C. Norman Howard, Warsaw, president; Dr. G. S. Marshall, of Indianapolis, first vice-president; Dr. D. W. Cochran, of Madison, second vice-president; and Dr. B. J. Larkin, of Indianapolis, was re-elected secretary and treasurer.

THE Northeastern Academy of Medicine, comprising Lagrange, Steuben, DeKalb and Noble counties, held its first meeting of 1923 at the Gawthrop Inn, Kendallville, January 4. Dr. Miles F. Porter, of Fort Wayne, presented a paper on "The Surgical Treatment of Gastric Ulcer" and Dr. George W. McCaskey presented a paper on "The Diagnosis and Medical Treatment of Gastric Ulcer".

DR. C. J. MCINTYRE has been made president of the new organization, the Indianapolis Association for Prevention and Relief of Heart Diseases. The association has as its object to gather information on heart disease, to develop and apply measures which will prevent heart disease and to seek and provide occupations suitable for patients with heart disease. Headquarters for the organization have been established at Room 204 Baldwin Block.

DR. JOSEPH C. BLOODGOOD of Johns Hopkins Medical School was the guest of the Terre Haute Academy of Medicine, February 2nd. A clinic was held at the Union Hospital from eleven to one, after which the hospital served luncheon to the physicians. In the afternoon Dr. Bloodgood spoke to the pupils and graduate nurses. The Academy dinner was at six, after which Dr. Bloodgood gave a lantern slide

talk on Cancer of the Breast. At eight o'clock a public meeting was held at the State Normal Hall with an address on Preventive Medicine.

THE Seventh Annual Clinical Session of the American Congress on Internal Medicine will be held in the amphitheatres, wards and laboratories of the various institutions concerned with medical teaching, at Philadelphia, Pa., beginning Monday, April 2nd, 1923.

Practitioners and laboratory workers interested in the progress of scientific, clinical and research medicine are invited to take advantage of the opportunities afforded by this session. Address inquiries to Frank Smithies, Secretary-General, 1002 North Dearborn Street, Chicago, Illinois.

DURING January the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Lederle Antitoxin Laboratories:

Bacillus Acidophilus Milk-Lederle.

E. R. Squibb & Sons:

Bacillus Diphtheroid Allergen-Squibb.

Staphylococcus Citreus Allergen-Squibb.

Bacillus Influenzae Allergen-Squibb.

Egg Yolk Globulin Allergen-Squibb.

Horse Serum Allergen-Squibb.

Winthrop Chemical Company:

Theocin Sodium Acetate.

THE United States Veterans' Bureau has opened a school for the training of personnel engaged in neuropsychiatric work at St. Elizabeth's Hospital, Washington, D. C. Dr. Frank F. Hutchins, formerly of Indianapolis, clinical director of neuropsychiatry in the United States Veterans' Bureau, is in direct charge of the school. The course will extend over a period of approximately four months. The doctors in this school will receive practical instruction and actual experience in the care and treatment of neuropsychiatric cases. It will be given at least twice each year until such time as the Veterans' Bureau will have sufficient trained personnel for that type of work.

A COURSE in operative surgery on the head and neck will be offered by the Indiana University School of Medicine at Indianapolis beginning Monday, May 7, 1923, at 7:30 p. m. and will continue for six weeks on Monday, Wednesday and Friday evenings. The course will be conducted by Dr. John F. Barnhill, professor of rhinology, otology, and laryngology, and will be open to any graduate physician of good standing who seriously desires advanced knowledge in the anatomy of these regions. Inasmuch as the enrollment must necessarily be limited

it is urged that interested persons make prompt application for enrollment. The fee for the course will be \$30.00. For further particulars address Registrar, Indiana University School of Medicine, Indianapolis.

A COURSE of twelve lectures on chemical subjects of interest to physicians and on scientific investigations of allied character will be given at 8:00 o'clock on Monday evenings commencing March 5, 1923, at the Indiana University School of Medicine, 1040 West Michigan St., Indianapolis, by Dr. D. D. Turner, Professor of Biochemistry and Pharmacology. The course will deal chiefly with questions of nutrition, intermediate food metabolism, basal metabolism, vitamins, the endocrine glands, renal efficiency tests in nephritis, etc. The fee for this course will be \$10.00. Those desiring to register should do so before February 21. Opportunity is also offered for practical laboratory work in blood analysis and allied subjects on Thursday evenings at 7:30 o'clock commencing March 8, 1923, and occupying about eight or ten evenings. The fee for this course is \$20.00, or the two courses together may be taken for \$25.00. The right is reserved to withdraw either course if the number registering is not sufficient. For further information address Registrar, Indiana University School of Medicine, Indianapolis.

THE Kosciusko County Medical Society has issued its program for the year 1923. All meetings will be preceded by dinner at six o'clock and scientific meetings will be held at 7:30. Meetings will be held as follows: January 16, Warsaw Library; a paper on "Tuberculosis" will be presented by Dr. J. H. Stygall, Indianapolis. February 20, Warsaw Library; paper by Dr. S. C. Murphy on "True Abdominal Pregnancy". March 20, Warsaw Library; paper on "Physio-Therapy" by Dr. W. W. Carey, of Fort Wayne. April 17, Warsaw Library; paper on "Diphtheria" by Dr. C. C. DuBois. May 22, Hotel Hays; symposium "Teeth and Systemic Effects". June 19, Mentone; paper on "Uterine Hemorrhage" by Dr. G. H. Van Dyke. July 17, North Manchester; paper on "Treatment of Syphilis" by Dr. R. V. Hoffman. August 21, Pierceton; paper on "Other Than Head Presentations" by Dr. C. R. Long. September 18, Warsaw Library; paper on "Surgery of Left Side of Abdomen" by Dr. J. C. Fleming. October 19, Warsaw Library; paper on "Common Affections of Colon" by Dr. F. J. Young. November 20, Warsaw Library; paper on "Gonorrhea; Sequelae and Treatment" by Dr. P. G. Fermier. December 18, Hotel Hays; election of officers. The officers of this society are: Drs. W. B. Siders, president; C. R. Long, vice-president; O. H. Richer, secretary-treasurer, and F. J. Young, delegate to state meeting.

SOCIETY PROCEEDINGS

COUNCILORS' MEMBERSHIP CONTEST

District	Councilor	Number of Counties	1921 Membership	1922 Membership to Date	Percentage
First.....	Dr. Willis	7	176	175	.99
Second.....	Dr. Smadel	7	149	148	.99
Third.....	Dr. Leach	9	130	119	.91
Fourth.....	Dr. Osterman	10	138	137	.99
Fifth.....	Dr. Weinstein	5	158	166	1.05
Sixth.....	Dr. Spilman	8	150	162	1.08
Seventh.....	Dr. Earp	4	425	445	1.06
Eighth.....	Dr. Conrad	5	172	169	.98
Ninth.....	Dr. Moffitt	10	253	257	1.02
Tenth.....	Dr. Shanklin	5	151	147	.97
Eleventh.....	Dr. Black	6	191	194	1.02
Twelfth.....	Dr. Van Sweringen	8	241	247	1.02
Thirteenth.....	Dr. Berteling	8	274	259	.95
		92	2608	2630	

INDIANA STATE MEDICAL ASSOCIATION

THE COUNCIL

The first meeting of the Council, Muncie session, was held at 5:30 p. m., September 27, 1922. Present Drs. Joseph Smadel, J. H. Weinstein, F. J. Spilman, S. E. Earp, E. M. Conrad, W. R. Moffitt, E. M. Shanklin, C. S. Black, W. D. Calvin, W. R. Davidson and Charles N. Combs.

Reports were received from the councilors concerning activities in their various districts, the most interesting one being that presented by Dr. Calvin, who sent out a questionnaire to each of the counties in the Twelfth District. His report evidenced a very thorough investigation of the medical activities under his jurisdiction.

Adjourned.

CHARLES N. COMBS, Secretary.

A called meeting of the Council, Muncie session, was held at 1:00 p. m., September 28, 1922. Present Drs. J. H. Weinstein, F. J. Spilman, S. E. Earp, E. M. Conrad, W. R. Moffitt, E. M. Shanklin, C. S. Black, Albert E. Bulson, Jr., and Charles N. Combs.

The chairman appointed Drs. Bulson, Weinstein and Earp to draft a report concerning the resolutions presented to the House of Delegates by the Indianapolis Medical Society, this report to be read before the meeting of the House of Delegates Friday morning.

Adjourned.

CHARLES N. COMBS, Secretary.

The last meeting of the Council, Muncie session, was held at 10:00 a. m., Friday.

Present Drs. C. S. Black, W. D. Calvin, E. M. Conrad, S. E. Earp, W. R. Moffitt, Joseph Smadel, J. H. Weinstein, W. R. Davidson, C. H. Good, Albert E. Bulson, Jr., and Charles N. Combs.

The new lines of action suggested by the House of Delegates, to be inaugurated for the coming year were discussed.

Dr. Conrad moved that it was the sense of the Council that Dr. Davidson, President of the Association, act as a member of the Committee to meet with the trustees and officers of the School of Medicine of the Indiana University to take up the questions involved in the resolutions presented by the Indianapolis Medical Society to the House of Delegates, that the president appoint the other members of the committee, and that the report of the committee be returned to the Council for approval and early publication in THE JOURNAL. Motion carried.

Adjourned.

CHARLES N. COMBS, Secretary.

The regular mid-winter meeting of the Council of the Indiana State Medical Association convened at 10:30 a. m., Friday, January 19, 1923, at the Severin Hotel, Indianapolis, with Chairman E. M. Shanklin presiding.

Roll call showed the following present: Drs. J. H. Willis, Joseph Smadel, A. G. Osterman, G. H. Smith, S. E. Earp, E. M. Conrad, Wm. R. Moffitt, E. M. Shanklin, C. S. Black and B. Van Sweringen; also President C. H. Good, Editor of THE JOURNAL, Albert E. Bulson, Jr., and Secretary Charles N. Combs.

The minutes of the previous meeting were read and approved.

Dr. E. M. Shanklin, of Hammond, was unanimously re-elected as Chairman of the Council.

The report of the Secretary-Treasurer was read and approved. (Printed elsewhere in this number of THE JOURNAL).

Dr. Bulson reported to the Council concerning the publication of THE JOURNAL and his report was accepted.

The councilors' reports were heard concerning the activities in their respective districts.

Drs. J. R. Eastman, A. E. Sterne, T. B. Noble, W. B. Kitchen and Fred Jackson, representing the Committee from the Indianapolis Medical Society, were present and presented to the Council some data concerning the meeting of the Council Committee appointed to confer with the Trustees and officers of the medical department of Indiana University. The report of the Committee of the Council was discussed, and it was moved and carried that this report should not be printed in THE JOURNAL, but that the president be instructed to ask the committee to hold another meeting with both the officers of the University and the committee from the Indianapolis Medical Society; and, further, that the final committee report be submitted to the Council before being printed.

At 12:30 the Council adjourned to a luncheon with the members of the Association Committee on Public Policy and Legislation. Dr. F. W. Gregor, chairman, and other members of the committee spoke concerning the plans of the Association in connection with proposed legislation which should be submitted to the legislature now in session.

At two o'clock the Council reconvened, meeting with the Committee on Public Education, Drs. W. N. Wishard, David Ross and F. W. Gregor. Dr. Wishard presented the matter of establishing the Bureau of Information of the Indiana State Medical Association, and submitted the following budget for the estimated expenses for the first year's work:

Stenographer	\$1,200.00
Rent	600.00
Equipment	600.00
Secretary's salary.....	2,500.00
Stationery, postage, traveling expenses.	300.00
Total	\$5,200.00

He recommended the appointment of Dr. J. N. Hurty as secretary of this Bureau, with offices at Indianapolis.

Dr. Van Sweringen moved the adoption of the report as read. Motion carried.

Dr. Bulson moved that since Dr. Hurty would not be available until about April 1st, the proposed plan should be placed in effect beginning April 1, 1923, and that the total appropriation should not exceed \$5,000.00 for the first year; and further that the perpetuation of the plan beyond the first year should be voted upon at the meeting of the House of Delegates at the Terre Haute session. Moved, seconded and carried.

Dr. Conrad moved that a Committee from the Council, consisting of Dr. Bulson as chairman, and Drs. Earp and Shanklin, be named to act as an Advisory Committee in connection with the Bureau of Information. Motion carried.

At 3:00 p. m. Dr. O. C. Breitenbach, of Columbus, and the president and other members of the Bartholomew County Medical Society appeared before the

Council. Dr. Breitenbach appealed to the Council concerning his expulsion from the Bartholomew County Medical Society, and the Council listened to evidence from both parties. The Council voted to sustain the Bartholomew County Medical Society in the expulsion of Dr. Breitenbach.

A resolution of regret was presented recording the loss sustained by the Council in the death of Councilor W. D. Calvin. It was ordered to be entered in the minutes.

Adjourned.

CHARLES N. COMBS, Secretary.

SECRETARY'S REPORT TO THE COUNCIL

For the fiscal year ending December 31, 1922, membership of the Association is as follows:

Membership Jan. 1, 1922.....	2,608
Died during 1922.....	31
Retired, left State, etc., during 1922.....	35
Delinquent since Feb. 1, 1921.....	117
	<hr/> 183
	2,425
New members for 1922.....	205

Membership January 1, 1923..... 2,630

This represents a net gain of twenty-two members and is the largest number we have had enrolled since 1917. An increase of forty-eight members in 1923 will place us ahead of any previous mark, and we feel very sure of accomplishing it.

The average gain for the entire state was 1 percent. The councilor district under the jurisdiction of Dr. Spilman made the largest gain, 7 percent. Drs. Weinstein and Earp tied for second place with 5 percent. At the bottom of the list is Dr. Leach with a loss of 10 percent.

I wish to call attention to the treasurer's report, which shows that our expenses this year were \$44.73 in excess of our income. However, this was offset this year by some money realized from the sale of furniture.

The cost of the medical defense this year was very low, and there was accumulated a surplus of over \$1,000 in the fund for this year alone.

Respectfully submitted,

CHARLES N. COMBS, Secretary.

TREASURER'S REPORT FOR 1922

GENERAL FUND

Income:

Balance on hand Jan. 1, 1922.....	\$ 9,016.86
Membership dues at \$4.00 per member (2,630 members).....	10,520.00
Muncie exhibitors.....	370.00
Sale of furniture.....	205.00
	<hr/>
Total income.....	\$20,111.86

Disbursements:

JOURNAL subscriptions, \$2.00 per member	\$ 5,260.00
Sec.-Treas.' stenographer.....	858.00
Sec.-Treas.' honorarium.....	500.00
Sec.-Treas., postage and supplies	130.36
Sec.-Treas., bond 1922.....	35.00
Sec.-Treas., bond 1923.....	35.00
Sec.-Treas., typewriter.....	102.50
Legislative Committee.....	519.75
Auto Committee.....	231.00
Special Committee.....	13.25
Printing	257.91
Storage	36.94
Councilors	66.68
Medical Defense Fund (75c per member)	1,972.50
Muncie Session.....	915.84

Rental	\$170.00
Stenographer's reports.....	400.34
Programs	72.40
Registration clerks.....	20.00
Badges	44.97
Guests	110.69
Scientific exhibit.....	70.44
Signs	27.00

Total disbursements.....\$10,934.73
Balance on hand Jan. 1, 1923.. 9,177.13

\$20,111.86 \$20,111.86

MEDICAL DEFENSE FUND

Receipts:

Cash on hand Jan. 1, 1922.....	\$ 587.91
Liberty Bonds.....	5,000.00
75c per member 1922.....	1,972.50
Interest	212.50

Total receipts.....\$7,772.91

Disbursements:

Bonds for 1922 and 1923.....	\$ 42.00
Attorneys' fees.....	698.00

Total disbursements.....\$ 740.00

Balance on hand Jan. 1, 1923:

Cash	2,032.91
Liberty Bonds.....	5,000.00

\$7,772.91 \$7,772.91

Respectfully submitted,

CHARLES N. COMBS, Treasurer.

Audited and approved, Jan. 19, 1923:

J. H. WILLIS,
B. VAN SWERINGEN,
Auditing Committee.

KNOX COUNTY

At the annual meeting of the Knox County Medical Society, held at the Y. M. C. A., Vincennes, December 12, 1922, the following officers were elected: Dr. J. W. Trueblood, Monroe City, president; Dr. Morris H. C. Johnson, Vincennes, vice-president; Dr. Charles E. Stone, Vincennes, secretary-treasurer; and Dr. D. H. Richards, Vincennes, censor.

CHARLES E. STONE, Secretary.

CORRESPONDENCE

FREE LABORATORY SERVICE BY THE STATE

The editor of THE JOURNAL has received a copy of a letter directed to the State Board of Health complaining about the injustice of free laboratory service by the State to those able to pay, and we feel that the subject matter is worthy of the serious attention of every doctor in Indiana and, accordingly, we reproduce the letter as requested. The letter is as follows:

Indianapolis, Ind., Jan. 16, 1923.

State Board of Health,
Indianapolis, Ind.

Dear Sirs:—A group of physicians whose specialty is Laboratory Diagnosis recently held an informal meeting with Dr. Wm. F. King, Secretary of the State Board of Health. As a result of this conference, and at the suggestion of Dr. King, the subject matter discussed at that time is herewith presented for your thoughtful consideration.

We are in full sympathy with the activities of the State Board of Health insofar as they pertain to features and problems of Public Health. We are not in sympathy with those activities in which the State enters into competition with practicing physicians in the diagnosis or treatment of cases which have no direct bearing upon the health or welfare of the community. The statute by which the State Laboratory of Hygiene was authorized defines and limits its activities to the making of examinations as an aid to the enforcement of public health measures, and for no other purpose.

At present the State Laboratory of Hygiene makes free examination of practically every kind of specimen sent in by physicians, regardless of whether such examination has any bearing upon the enforcement of public health measures, and regardless of whether the patient is indigent and hence a proper beneficiary of free public medical service. A natural outgrowth of this situation is that physicians send all types of specimens from patients who CAN and DO pay the physicians for the service which the State Laboratory renders free at the expense of the taxpayer. So prevalent has this custom become that many physicians openly state that they make no charge for the examination that is made free by the State Laboratory, but that they charge \$5.00 for drawing the blood or collecting the specimen and sending it to the laboratory. This can be substantiated by an abundance of sworn testimony if necessary. The records of the State Laboratory will show what a huge volume of Wassermanns and of other examinations is being done on private cases by physicians at public expense. A policy which makes it possible, even invites, physicians to benefit from public service at the expense of public funds is indefensible and demands revision.

We are fully cognizant of the fact that the State Board of Health never outlined as its policy a course intended to accomplish the situation that now exists. We recognize the fact that the work of the State Hygienic Laboratory grew to its present proportions and scope as a process of development rather than in accordance with a pre-formed policy. We also realize that there should be some definite policy adopted and rigidly adhered to, which policy should, and we trust will, limit the activities of the State Hygienic Laboratory to a rational interpretation of its function as defined by statute.

The attitude of the Medical Profession toward this subject is indicated by a series of resolutions passed by the Indianapolis Medical Society, and endorsed by the Indiana State Medical Association at its last annual meeting. The full copy of these resolutions can be seen in the transactions of the Association in the October number of the Journal of the Indiana Medical Association. The portions pertaining to this subject are quoted below:

"Whereas, The State has the right and duty to conduct and maintain adequate State and County Health Boards, and insofar as it fulfills all these above indicated rights and duties, should have and does have the unqualified support of the Medical Profession in the fulfillment of these vested rights which in no sense conflict with the principles hereinafter set forth, and

Whereas, Certain abuses of the above rights and duties, which abuses if unchecked will develop into State Medicine, and

Whereas, The indicated abuses have been and still are indulged in by the State or its agents, we, therefore, offer the following solutions as a platform of principles upon which the Indianapolis Medical Society should stand:

RESOLVED:

1. That while the Indianapolis Medical Society heartily supports the proposition that the State should care for its mental and moral defectives and its indigent sick, it unqualifiedly condemns the tendency of the State to enter into competition with licensed physicians in the practice of Medicine and Surgery.

2. That it commends the establishment of free clinics for the treatment of tuberculosis, mental hygiene, venereal and other diseases of the indigent sick, but for no other than the indigent.

10. That it condemns the socialistic efforts of the State, Federal, County, or Municipal agents to force the expense of private health upon the taxpayers under the guise of public health."

The undersigned would not presume to suggest to the State Board of Health how it should perform its offices, but inasmuch as Dr. King asked that such modifications as we feel would obviate the above criticisms should be suggested we venture to submit the following:

We commend and pledge our support to the efforts of the State Board of Health to recognize and properly to safeguard all cases of diphtheria, typhoid fever and similar contagious diseases. The recognition of the open or communicable stages of venereal diseases and tuberculosis may logically be considered a public health problem. Such laboratory tests as are an aid to these would be regarded as within the intent of the statute. The performance of the Wassermann test for public institutions whose inmates are in any sense wards of the State could not be criticised. But we maintain that this test should be performed by the Public Health Laboratory only for the inmates of such institutions, public venereal clinics and the indigent.

The various routine examinations of sputums, urines, and feces, the diagnosis of tissues from surgical cases and from autopsy examinations, and the making of microscopic and other examinations of bloods we regard as a direct invasion of the field of

Diagnostic Medicine. Such examinations are not an aid in any way to the enforcement of public health measures. The State, in making such examinations, at once enters into competition with physicians whose specialty is Clinical Diagnosis, and at the same time pauperizes the patients at the expense of the taxpayers.

If such examinations should be made only upon specimens from indigent patients there would remain no ground for criticism. But the indigent are already cared for in this field by the various public hospitals, dispensaries, and clinics. The bulk of such examinations which are now made by the Hygienic Laboratories are upon specimens sent by physicians from their own private cases who are in no sense public health problems, and do not fall within the scope of the statute. If it were desired to maintain a laboratory service for the benefit of indigent patients occasionally treated by physicians as private cases, then this should be rigorously safeguarded against the abuses that now exist. This might be satisfactorily accomplished by requiring the physician to sign a statement such as the following, which should be printed upon the card accompanying the specimen:

"I hereby certify that (Patient's name) from whom this specimen was taken, is indigent to the degree that he is unable to pay for medical attention, and I further certify that I am making no charge whatsoever for my services in this case."

(Signed) _____, M.D.

We, the undersigned, respectfully urge upon the State Board of Health a thoughtful consideration of the foregoing, and urge the establishment and publication of a policy which will abolish those practices which are subject to just criticism.

(Signed)

H. K. LANGDON,
V. H. MOON,
ELMER FUNKHOUSER,
J. R. THRASHER,
BERNARD ERDMAN,
H. H. WARVEL.

In connection with the subject considered in the foregoing letter we believe that a personal letter from the Secretary of the State Board of Health contains much food for thought and accordingly we herewith reproduce it:

Indianapolis, February 1, 1923.

Dr. Albert E. Bulson, Jr.,

Editor, Journal Indiana State Medical Assn.,

406 W. Berry St., Fort Wayne, Indiana.

Dear Doctor Bulson:

This will acknowledge receipt of your letter of January 27th., in regard to the State Laboratory being imposed upon by physicians and in regard to the services that should be rendered by the Laboratory. This matter has been brought to my attention by laboratory men of Indianapolis and other parts of the state and I have assured them that it will be taken up by the Board soon and thoroughly considered.

I do not wish to seem to argue the question, because my mind is open to conviction on the subject and I shall be governed entirely by facts as they are disclosed in the consideration we expect to give the subject. However, I wish to call your attention to that which seems to be a fundamental fact in the whole matter—namely, that the Laboratory, in no instance, furnishes a service to the people except as such service is furnished through the physicians of the state, and if this is an injustice to the physicians it is an injustice that is worked by members of the profession upon other members of the profession, and if individuals are pauperized through the service rendered by the Laboratory, the physicians who are using this service must accept at least a part of the responsibility.

Let me call your attention to another consideration that seems to me to be fundamental, namely—that if the physicians of Indiana cannot be trusted to extend professional courtesies to each other and to uphold the traditions of the profession in their dealings with the Laboratory, but on the contrary are disposed to exploit the Laboratory for their own commercial advancement, and that at the expense of their brothers in the profession, it will be hard to believe that these same physicians can be trusted when they certify that patients for whom work is being done are indigent and that they are receiving no fees of any kind for the services they are rendering.

As stated above, I am not expressing this in any sense as an argument, but merely calling attention to what I believe to be a fact—namely, that the Laboratory alone cannot solve the problem presented, but that there must be assurance that the medical profession of the state will meet the Laboratory at least half way in any solution undertaken. However, let me say again, that the State Board of Health will go into this whole matter fully and will have in mind the

good of the medical profession as well as the public good, in any action which may be taken.

Thanking you for your interest in this matter and with my kindest personal regards, I am

Very truly yours,

WM. F. KING,

Secretary, Indiana State Board of Health.

THE BUREAU OF MEDICAL INFORMATION

Indianapolis, Indiana, February 5, 1923.

Editor of THE JOURNAL:

My attention has been called to a bulletin issued by one of the prominent medical societies of the State in criticism of a newspaper article emanating from the pen of the former Secretary of the State Board of Health and now Secretary of the Bureau of Medical Information of the Indiana State Medical Association.

As neither the Association nor any of its committees had any part in the preparation or supervision of the article in question or of its criticism, I will not enter into a discussion of the merits or demerits of either. However, in view of all of the facts connected with the intent and purpose of the article, I ask the question, "Was the criticism merited?"

As one having to do officially with the public policy of the Indiana State Medical Association I desire to take advantage of this opportunity to discuss some things pertaining to the subject.

I think it will be agreed by all that the situation would be improved greatly if there could be brought about a better understanding between the public and the medical profession concerning the things for which the Indiana State Medical Association stands. A recent referendum vote in the State of California reflects a public sentiment which, to my mind, is universal, and this in the face of the marvelous advance in the science and art of medicine. States continually are permitting individuals to enter into this solemn engagement to practice the healing art, regardless of qualifications, and are refusing to write a statute which will prohibit it. In instances where the law making bodies have been made to appreciate their responsibility and have written a strong statute designed to protect the public from unqualified practitioners, public sentiment through the jury system has defeated the purpose of the law so that at the present time the State Board of Medical Examination and Registration has despaired of successful results in prosecution of infractions of the medical law. If any member of the Association is skeptical concerning the sentiment of the public toward the profession I wish to assure him that his skepticism will be removed when he has approached a few laymen on a matter of interest to the profession and talked seriously concerning the matter. We must admit that the personnel that goes to make up our legislature represents a fair average of the intelligence of the community, and right here one may very soon get the measure of the medical profession from "the layman's yard-stick."

If this condition exists, and it does, who is responsible for it—who is most desirous of having it removed—and who should be most capable of removing it? Why, the profession itself, of course! But here is the rub. Has not the medical profession in the past been entirely too sufficient unto itself? Has it done its part to bring about the proper bond of sympathy between the public and itself? Sane counsel everywhere advises that education offers the only sure avenue of success. There are no secrets concerned in the science and art of medicine. Then why has not the profession long ago adopted a policy toward the public designed to acquaint the public with the ideals, ethics, altruisms and the advancements that have been and constantly are being made in the progress of the science and art of medicine?

A member recently stated in the House of Delegates of the American Medical Association that "the medical profession is fighting with its back to the wall". Men who are conversant with the spirit of the times, mature in years and unselfishly interested in the ideals and progress of the medical profession, are convinced that the statement is too true, and so generally has the fact been recognized that there has been a general awakening to the necessity of meeting the situation which, being recognized in the great national medical organization, is passing down through the State to the county medical societies. The controlling thought of this movement is for a sane, dignified campaign, having for its object the bringing about of a better understanding between the public and the medical profession. Pursuant to this thought there was adopted unanimously by the House of Delegates of our State Association at the Muncie session a motion providing for the appointment of a committee to be known as the Educational Committee to carry on this work. This action by the House of Delegates was ratified by the Council at its January meeting, and on recommendation of the Committee the name was changed to that of the

Bureau of Information, and two additional members of the Committee were added, making a total of five in all.

The serious undertaking and the delicate nature of the work of the Bureau of Information must be apparent to everyone who gives the matter a moment's thought. In the first place the Bureau must collect such information as will be useful for its purpose, it must edit every particle of information very carefully so that every ethical and professional interest may be conserved and the information represent the composite view of the profession. The Bureau must be ready to serve the Association with information of every kind and character pertaining to the subject matter, and this means that it must be ready to supply material for lay publications and to furnish speakers for lay and semi-professional meetings and, under any and all circumstances, the interests of the profession are to be guarded. The members of the Association must assume an attitude of helpfulness and of tolerance if this work is to succeed. They should stand ready to supply information and articles for the use of the Bureau of Information in fields in which they are requested to represent, knowing that their names are not to appear in connection with articles and that the articles are to be edited by the committee before being published, thus insuring that the matter published will represent the composite view of the profession on the subject. The committee realizes that in placing Dr. J. N. Hurty at the head of the Bureau it is fortunate in having a man who not only at once has the public ear as probably no one else has it, for this particular work, but it has in Dr. Hurty one skilled in publicity matters.

The members of the Association can well depend on the committee to safeguard their every interest in such a virgin field of endeavor. However, some mistakes are sure to creep in, but with a spirit of tolerance and due regard for the seriousness of the task, no fear need be entertained for the success of the enterprise. Criticism of a constructive character is invited, but medical organizations should exercise every care that they not be made a party to some individual's views.

It is deplorable that of the seven thousand physicians in the state less than half of the number are enrolled as members of the Indiana State Medical Association, but I believe that there will be a very substantial increase in the membership when the Bureau is well on its way. If this enterprise is supported properly in and out of the Association it will do more to deter the public from falling into the hands of quackery than anything else ever offered. It does not in any way compromise our ethics, but our best ethics demand that we support it.

I feel very sure that if the Bureau is continued for a period of two years its benefits will be so apparent that the Association would not discontinue it at a cost many times what it actually will be.

Respectfully

FRANK W. CREGOR,
Chairman Committee on Public Policy.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

DIGITAN AMPULES (FOR HYPODERMIC USE).—Each Cc. contains 16 minims (1 Cc.) of a sterilized solution of digitan (see New and Nonofficial Remedies, 1922, p. 105), equivalent to digitan, 1½ grains (0.1 Gm.). Merck & Co., New York.

DIGITAN SOLUTION (FOR ORAL USE).—1 Cc. contains digitan (see New and Nonofficial Remedies, 1922, p. 105) 1½ grains (0.1 Gm.). Merck & Co., New York.—*Jour. A. M. A.*, Jan. 13, 1923, page 106.

BACILLUS DIPHTHEROID ALLERGEN-SQUIBB.—Prepared from the protein from Bacillus diphtherie.

STAPHYLOCOCCUS CITREUS ALLERGEN-SQUIBB.—Prepared from the protein from Staphylococcus citreus.

BACILLUS INFLUENZAE ALLERGEN-SQUIBB.—Prepared from the protein from Bacillus Influenzæ. For a description of the Bacterial Allergens-Squibb see New and Nonofficial Remedies, 1922, p. 247.

EGG YOLK GLOBULIN ALLERGEN-SQUIBB.—Prepared from the purified globulin of yolks of hens' eggs.

HORSE SERUM ALLERGEN-SQUIBB.—Prepared from protein of normal horse serum.

For a description of Food Allergens-Squibb see New and Nonofficial Remedies, 1922, p. 241. E. R. Squibb & Sons, New York.—(*Jour. A. M. A.*, Jan. 27, 1923, p. 251).

PROPAGANDA FOR REFORM

THE DISAPPOINTMENTS OF HEXAMETHYLENAMIN.—Hexamethylenamin has joined the large and growing group of drugs of which much has been expected but which have failed to justify the hopes of their champions. The use to which hexamethylenamin is still devoted with apparent scientific justification is in preventing the growth of microorganisms in the urinary tract and in destroying them when they are present in the urine in infectious diseases, such as typhoid fever. The drug is recommended as an antiseptic in cystitis and as a prophylactic prior to operations on the urinary tract.

Its possible efficacy, however, depends on the elimination through the kidneys with a urine that remains distinctly acid in reaction; otherwise no benefit is to be expected. Hexamethylenamin has no material antiseptic value as an antiseptic in the cerebrospinal fluid during spinal meningitis. It is not a uric acid solvent. Finally, the drug has been shown to have no diuretic potency. Furthermore, hexamethylenamin is said to be liable to produce renal irritation when the dosage is large or the use protracted.—(*Jour. A. M. A.*, Jan. 6, 1923, p. 37).

HOROVITZ PROTEIN SUBSTANCE No. 10.—The composition of Number 10 Protein Substance for syphilis of the Horovitz Biochemic Laboratories is essentially secret. The claims made are unwarranted and may lead physicians to use the product unwisely. A. S. Horovitz, president of the Horovitz Biochemic Laboratories, was referred to in connection with the asserted cancer cure "Autolysin" (The Horovitz-Beebe Treatment for Cancer, *Jour. A. M. A.*, July 24, 1915, p. 336). Later he was connected with the Wm. S. Merrell Co. and appears to have been responsible for this firm's line of "Proteogens" which the Council on Pharmacy and Chemistry declared inadmissible to New and Nonofficial Remedies in 1919. The claims advanced for the products marketed by the Horovitz Biochemic Laboratories bear a striking resemblance to those advanced for the Merrell Proteogens. As in the case of the Proteogens, the Horovitz Laboratories have a list of "Protein Substances" each of which is claimed to be more or less specific against a given disease or condition.—(*Jour. A. M. A.*, Jan. 6, 1923, p. 54).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: C. J. C. Regulator (C. J. Czarnecki), containing iron chlorid, a small amount of plant material, a trace of oil of tansy and alcohol. C. J. C. Liniment (C. J. Czarnecki), containing camphor, menthol, chloral hydrate, ether, ammonia water and alcohol. Allan's Red Wash and Sandalwood Emulsion Compound (Allan-Pfeiffer Chemical Co.): Allan's Red Wash (Allan-Pfeiffer Chemical Co.), containing zinc sulphate, boric acid, a phenol, eucalyptol, a trace of alkaloid and water and Sandalwood Emulsion Compound (Allan-Pfeiffer Chemical Co.), containing santal oil, mineral oil, methyl salicylate, copaiba, a small amount of magnesium and calcium salts and water. Parrott Mixture (Allan-Pfeiffer Chemical Co.), consisting of an emulsion of turpentine oil, methyl salicylate, camphor, copaiba, gum and water. Parrott Sexual Pills (Allan-Pfeiffer Chemical Co.), containing strychnin and a compound of iron and phosphorus. Am-O-Lox Ointment (Am-O-Lox Co.), consisting essentially of zinc oxid, sulphur, phenol, methyl salicylate and a small amount of dye in a base composed of petrolatum and paraffin. Am-O-Lox Prescription (Am-O-Lox Co.), consisting essentially of glycerin, carbolic acid, salicylic acid, methyl salicylate, alcohol, water and coloring matter. Vigeron (Sydney Ross Co.), sugar-

coated pills containing compounds of iron, zinc, manganese, arsenic, phosphorus and strychnin.—(*Jour. A. M. A.*, Jan. 6, 1923, p. 53).

PRESENT STATUS OF INSULIN.—The investigators of "Insulin"—the new pancreatic extract proposed for the treatment of diabetes—have applied for a patent on the product in Canada, United States and Great Britain. The patent for Canada and the United States has been tendered, when granted, to the University of Toronto. The University proposes to safeguard the product against commercial exploitation and to ensure the marketing of a standardized product. From the present indications it is hoped that the experimental period will be ended during the first half of 1923 so that the product will become available. Dr. McLeod believes that "Insulin" will never entirely replace careful dietary regulations, but that it is of undoubted value in assisting the weakened power to metabolize carbohydrates.

It is to be hoped that the University of Toronto will be able to control the advertising claims and methods of marketing of the product.—(*Jour. A. M. A.*, Jan. 6, 1923, p. 36).

ANTIBERIBERI VITAMIN CONCENTRATE - METZ.—The Council on Pharmacy and Chemistry reports that the Metz Laboratories have requested the acceptance for New and Nonofficial Remedies of Antiberiberi Vitamin Concentrate-Metz. The firm supplied adequate information in regard to the process whereby the product is obtained, and has presented evidence to show that the potency of the product is controlled by adequate animal tests. The firm, however, presented no proof to indicate that the product is of value therapeutically in human beings, and hence it could not be admitted to New and Nonofficial Remedies. The firm wished to make available to students and investigators of nutrition a product which is claimed to be antineuritic (antiberiberi) when fed to pigeons. It increases the food intake of rats fed on substance deficient in vitamin B and causes increased weight, but not to the same extent as does the vitamin B (according to McCollum's nomenclature). The Council deemed that from a scientific standpoint Antiberiberi Vitamin Concentrate-Metz is suitable for study, suitable for animal experiments and for controlled experiments on man, and hence authorized publication of a preliminary report.

Antiberiberi Vitamin Concentrate-Metz is prepared from brewers' yeast.

The vitamin extract is standardized so that 0.065 gm. shall represent the antineuritic potency of 10 gm. of freshly pressed brewers' yeast. The product is marketed in the form of powder tablets, and solution (1 cc. containing the antineuritic potency of 10 gm. freshly pressed brewers' yeast.)—(*Jour. A. M. A.*, Dec. 13, 1922, p. 106).

CULTURE-LAC OMITTED FROM N. N. R. AND OPTOLACTIN NOT ACCEPTED.—Culture-Lac is described in New and Nonofficial Remedies, 1922, as a culture of *Bacillus bulgaricus* manufactured by the Geck Laboratories, New York. The Special Pharmacal Co., Inc., Buffalo, N. Y., advised the Council on Pharmacy and Chemistry that it now owned Culture-Lac. The product now marketed, however, is not the preparation described in New and Nonofficial Remedies as Culture-Lac, but is said to be a culture containing *Bacillus acidophilus* and *Bacillus bulgaricus*. The Council directed that the Culture-Lac of the Geck Laboratories be omitted from New and Nonofficial Remedies because it is off the market. The Council declared the Culture-Lac of the Special Pharmacal Co., Inc., to be inadmissible to New and Nonofficial Remedies (1) because there is no acceptable evidence for the administration of a mixture of *B. bulgaricus* and *B. acidophilus*, and (2) because the preparation was marketed with unwarranted therapeutic claims.

Optolactin is the name applied by Fairchild Bros. and Foster to a tablet said to contain mixed cultures of *B. bulgaricus* and *B. acidophilus*. The Council on Pharmacy and Chemistry declared Optolactin inadmissible to New and Nonofficial Remedies (1) because there is no acceptable evidence for the use of the mixture, (2) because its name is not descriptive of the composition, and (3) because the circular accompanying the trade package is likely to lead to the ill-advised use of Optolactin by the public.—(*Jour. A. M. A.*, Jan. 13, 1923, p. 127).

BACILLUS ACIDOPHILUS AND INTESTINAL PUTREFACTION.—While the administration of soured milk products is at times beneficial, the cause of this beneficial action is still undetermined. The belief that the Bulgarian bacillus can be permanently implanted in the intestinal tract and that this implantation is responsible for the effects is no longer tenable. Of late attention has been called to the effects of the administration of milk cultures of *Bacillus acidophilus* which is stated to be a normal inhabitant of the human intestinal tract.

It is reported that this bacillus may be successfully implanted in the intestinal tract provided a suitable pabulum is provided. It has been assumed that the acidity of putrefactive organisms would be almost entirely suppressed by a change of the flora produced by the administration of milk containing cultures of *Bacillus acidophilus* and that with such implantation, the somewhat hypothetical toxic products charged with harm to the body might also be expected to be suppressed. If indican excretion, however, may be taken as an index of intestinal putrefaction, it now appears that implantation of *Bacillus acidophilus* in the intestine does not lower the putrefactive process.

This suggests that favorable clinical effects produced by the administration of lactose cultures of *Bacillus acidophilus* are not primarily dependent on decreased production of the antecedents of indican.—(*Jour. A. M. A.*, Jan. 20, 1923, p. 186).

NEISSER-SAN-KAHN NOT ACCEPTED FOR N. N. R.—Neisser-San-Kahn is marketed by the York Laboratories as "a new genito-urinary product" with the claim that "in Neisser-San-Kahn the genito-urinary surgeon has at his command a new salt of marked value in urethral infections". The product is said to be a definite chemical body, zinc borosalicylate.

Neisser-San-Kahn is claimed to be a new chemical compound. A preparation claimed to be zinc borosalicylate, however, was introduced about ten years ago (in Germany) as "Mucosan" with claims similar to those now made for Neisser-San-Kahn. The Council on Pharmacy and Chemistry declared Neisser-San-Kahn inadmissible to New and Nonofficial Remedies (1) because it is an unoriginal preparation under a proprietary non-descriptive name which the Council cannot recognize because the York Laboratories are not the discoverers of the product to which the name is applied, (2) the therapeutic claims are unwarranted, and (3) the available evidence fails to show that the preparation claimed to be zinc borosalicylate has any advantage over established zinc salts.—(*Jour. A. M. A.*, Jan. 20, 1923, p. 201).

QUAYLE'S "BOB-WHITE HABIT SINKERS."—Charles H. Quayle, M.D., of Madison, Ohio, "Medical Director" of the "Dr. Quayle's Sanitarium, A Retreat for Drug Addicts, Alcoholics, and Cigarette Inveterates" and "Specialist in Drug and Liquor Addiction," has been exploiting an alleged cure for chronic morphinism "and any other drug addiction". Formerly the treatment was "not for sale to any layman or person who wishes to treat himself" and physicians were importuned to use it. Today we find the Quayle's product advertised in the *Police Gazette* and similar literary productions. A "treatment" was purchased by a layman (for twenty-five dollars) and turned

over to the A. M. A. Chemical Laboratory for analysis. The "treatment" consisted of four boxes of pills labeled as follows:

"No. 1—Eliminative" (Contained 3 chocolate-coated pills and 1 capsule.)

"No. 2—Antidote" (Contained 323 yellow-coated tablets.)

"No. 3—Nerve Tonic" (Contained 37 red-coated pills.)

"Special Eliminative Bowel Tablets" (Contained 12 white-coated tablets.)

The analysis demonstrated that the "treatment" is essentially (1) active elimination by cathartics, (2) the administration of atropin during the stage of morphin withdrawal, and (3) the use of strychnin at the close of the "treatment". It is evident that this is no more a cure than could be devised by any physician who is familiar with modern medical literature. No physician will believe that a patient suffering from chronic morphinism can cure himself by any such method as that exploited by Quayle.—(*Jour. A. M. A.*, Jan. 27, 1923, p. 270).

BOOK REVIEWS

HOW TO GET WHAT YOU WANT. By Orison Swett Marden. 350 pages. Price, in connection with one year's subscription to *Success*, \$3.50. Thomas Y. Crowell Company, publishers, New York.

This book is one of the so-called inspirational books the author of which is editor of a magazine called *Success*. About all that is contained in the book may be summed up in the one sentence, "Make up your mind you are going to get something, and then get it." So far as we can judge from reading the book there is not very much that is inspiring in it, unless the reader has a leaning toward the "New Thought" cult, or Christian Science. One cannot become inspired or even enthused over the suggestion that *anything* is accomplished through the mind, even the acquiring of health, and that anyone by having thoughts of prosperity or thoughts of success will have the wishes gratified; nor can we have a very high regard for a book that suggests that all diseases of whatever nature are but products of the mind. That the attitude of the mind has a great deal to do with the success of an individual no one will deny, but that it will grow hair on a bald head, turn paupers into millionaires, or accomplish anything in the way of extraordinary results is the sheerest nonsense. Optimism should be possessed by all who desire to succeed, but all troubles and difficulty of whatsoever nature, whether applied to health or business, are not overcome alone by optimism or any mental gymnastics.

I BELIEVE IN GOD AND IN EVOLUTION. By William W. Keen, M.D.; Emeritus Professor of Surgery, Jefferson Medical College, Philadelphia. Cloth, 100 pages. \$1.00. J. B. Lippincott Company, Philadelphia.

Anything which comes from the pen of Dr. William W. Keen is interesting, and this book, just published, is no exception. It is an enlargement of an address delivered before a theological seminary and widely commented upon by the press. The author endeavors to prove that science and the scriptures are thoroughly compatible and that no one should have any difficulty in believing in both. He points out that the children of Israel, for whom the Pentateuch was written, were Orientals and were living in the intellectual childhood of the human race. "Had God sent this message to them in the modern, matter-of-fact, Occidental form, they would hardly have comprehended it and might easily have rejected it. Their

minds were cast in a poetic mold, their literature was permeated with imagery, metaphors and parabes. It was delivered to them by bards, priests and prophets." Dr. Keen says that he does not believe that the most sincere literalist can insist that while Adam was made unconscious an actual rib was taken from his body and out of it was fashioned a woman, and that Eve and the serpent actually could converse together in intelligible speech. He also might have added the story of Jonah and the whale. To those who are familiar, even in a general way, with Oriental literature, this is clearly to be understood figuratively and not literally. What Dr. Keen attempts to do, and accomplishes exceedingly well, is to substantiate almost incontrovertibly the facts of evolution, and he quotes the results from his surgical operations and experiments to prove his contention. He also attempts to show why there is a perfect harmony of science and the scriptures. The proof presented seems to verify the theory that man ascended from the lower animals, but Dr. Keen says that this does not in any way conflict with scriptural truth.

PITFALLS. By A. J. Caffrey, M.D., Assistant Professor of Medicine at Marquette University School of Medicine. Cloth. 200 pages. \$2.00 net. Richard G. Badger, Publisher, The Gorham Press, Boston, 1922.

This is a very entertaining as well as instructive book placing before the medical man as well as lay reader the pitfalls into which physicians are apt to fall unless they are on their guard. For the most part the chapters deal with actual experiences of physicians and are therefore true to life. The incidents are peculiar though not unusual, some of them humorous, others tragic, and all offering a warning to the physician who comes in contact with all classes of people in the care of every possible kind of human ailment.

BRONCHOSCOPY AND ESOPHAGOSCOPY. By Chevalier Jackson, M.D., Professor of Laryngology, Jefferson Medical College, Professor of Bronchoscopy and Esophagoscopy, Graduate School of Medicine, University of Pennsylvania. Octavo of 246 pages with 114 illustrations and 4 color plates. Philadelphia and London; W. B. Saunders Company, 1922. Cloth, \$5.50 net.

Those of us who are familiar with the work of Chevalier Jackson in teaching, writing and practice are ready to welcome anything new that comes from his pen. While the author says that the book is based on an abstract of the author's larger work entitled "Peroral Endoscopy and Laryngeal Surgery," yet it is sufficiently comprehensive to convey an intelligent idea of the purely manual endoscopic procedures which have been developed to such a high degree of precision and usefulness by Dr. Jackson. In fact, as has been well stated by many of those who have witnessed his work, Dr. Jackson, a master of this branch of surgical practice, possesses almost uncanny skill in the practice of bronchoscopy and esophagoscopy. It is but natural therefore that he should be able to present the subject in text-book form in a manner that meets with the approval of all those who attempt such difficult work. The book deals in a concise way with everything pertaining to bronchoscopy and esophagoscopy, from the selection of instruments, the acquiring of skill, the method of using the instruments, and the positions of the patient in which to secure the best results, to the recognition of diseased conditions, their method of treatment and the difficulties encountered in foreign body extraction. We scarcely see how the book could be improved upon within the limits of a working manual such as the author claims it to be.

PHYSICAL DIAGNOSIS. By W. D. Rose, M.D., Lecturer on Physical Diagnosis and Associate Professor of Medicine in the University of Arkansas. Third Edition. 754 pages. 319 illustrations. Cloth, \$8.50. C. V. Mosby Company, Publishers, St. Louis, 1922.

Physical Diagnosis is a subject that too often is either slighted or the findings from which are misinterpreted. A good teacher of the subject soon establishes a reputation that travels far and wide among students and practitioners. For the same reason a good book on the subject likewise attains instant success when readers learn its value. The volume under consideration, representing the third revised edition, belongs to the class that not only are readable because the subject has been presented in a readable way, but because the salient facts of the subject are presented in a logical manner. The author freely states that he has had in mind the medical student and the busy practitioner, and he certainly has accomplished his purpose well. Special emphasis has been placed upon the physical findings in the commoner diseases of the respiratory and circulatory systems, and the anatomy and pathology have been considered from the clinical standpoint, emphasis being laid upon these subjects as they influence the clinical manifestations of disease. The author also has discussed the principle of diagnostic signs referable to the head, neck and limbs, together with a minimum examination of the nervous system. There is an excellent chapter on "Radiographic Diagnosis", and much new material has been added to cover all of the recent advances on the subject. A very valuable feature of the book is the large number of splendid illustrations which materially add to the elucidation of the text.

PRINCIPLES OF MEDICAL TREATMENT. By George Cheever Shattuck, M.D., A.M., Assistant Professor of Tropical Medicine, Harvard Medical School. Fifth revised edition, with added contributions by a number of noted authors. Cloth. 312 pages. Price \$3.50. W. M. Leonard, Incorporated, Publishers, Boston, 1921.

The author rightfully claims that this is a book on the fundamentals, and as such is invaluable to the busy practitioner. It reports the principles of treatment based on known pathology. The methods described are those that have been tried and found practicable and effectual at the Massachusetts General Hospital or in private practice. Concerning this book, Dr. Richard Cabot says, "I know of no book on therapeutics which contains so much that seems to me true and so little that seems to me error," a statement which practically every reader of the book will sustain in the light of experience. The book is made more valuable by contributions on "Tuberculosis," by John B. Hawes, 2nd, M.D.; on "Acute Infectious Diseases Most Common in Childhood," by Edwin H. Place, M.D.; "Influenza," by Gerald Blake, M.D.; "Diabetes Mellitus," by Benjamin H. Ragle, M.D.; and "Serum Treatment of Pneumonia," by Henry M. Thomas, Jr., M.D. We can cheerfully recommend the book as being eminently practical, and one of the books that will be appreciated by the busy practitioner who wants to get in condensed form all that will help him in his everyday work.

THE PLACE OF VERSION IN OBSTETRICS. By Irving W. Potter, M.D., F.A.C.S., Obstetrician-in-chief, Deaconess Hospital and St. Mary's Hospital. Cloth, price \$5.00. Pp. 138, with 42 illustrations. St. Louis: C. V. Mosby Company, 1922.

This little book belongs in the domain of controversial literature. It is very largely a reprint of

papers which have appeared elsewhere. It should be read by all those who are interested in the subject of obstetrics. It is certainly not a text-book for the medical student or the tyro. The author states that version must be done only in properly selected cases but the Reviewer must confess that in a careful reading of the book he has been unable to discover the author's indications for the procedure. The following table is illuminating:

"Last report for year ending August 31, 1921:	
Number of patients delivered.....	1130
Abdominal cesarian section.....	100
Breech	29
Instrumental vertex.....	25
Footling	11
Transverse or complex presentations treated by version.....	4
Vertex L. O. A.	9
Spontaneous (delivered themselves).....	9
Instruments on after coming head following version	2
Face (treated by version).....	3
Twins (5 pair treated by version).....	10
Craniotomy	4
	206

(14 of these were versions as stated above.)

Versions, 938."

Out of a total of 1130 deliveries Potter performed 938 versions, 100 abdominal cesarean sections, 4 craniotomies and 25 forceps to the vertex!

The illustrations are for the most part very good.

THE LIFE OF JACOB HENELE. By Victor Robinson, M.D., Editor of *Medical Life*. Paper. Price, \$3. Pp. 114. New York: Medical Life Company, 1921.

This artistically printed little volume deals with the life of one of the greatest of all anatomists. Henele bequeathed to us the true knowledge of epithelium, the rational outlook upon pathology, possibly the germ theory as well as the most comprehensive study of the human body that has yet appeared. Robinson is an interesting writer and he has presented a book of distinct value to American Medico-Historical writings. It is only fair to state that Robinson has closely followed Merkle's *Life of Henele*.

THE GLAND STEALERS. By Bertram Gayton. Cloth. 314 pages, \$1.75. J. B. Lippincott Company, publishers, Philadelphia, 1922.

To use the preface to the book, the story is about "Gran'pa, ninety-five years of age, possessed of a fortune, a fertile imagination and a good physique. He sees in the papers accounts of the theory of rejuvenation by means of gland-grafting. Nothing will satisfy him but that the experiment should be made upon himself. He acquires a gorilla, a hefty, murderous brute, and the operation is performed with success. That is only the beginning.

"He next determines to dig out an old love and make her young, too; and Sally, a dear old lady of seventy, arrives upon the scene. Inspired to philanthropy by the thrill of regained youth, Gran'pa decides to take a hundred or so old men to Africa, capture a like number of gorillas, and borrow their glands. There are thrilling adventures with the gorillas, whilst the old gentlemen supply the comedy—there are not enough glands to go round. The result of the operations is a surprise to all, particularly to the old gentlemen themselves."

The story is mildly interesting, is humorous in spots, but is reasonably well told. Like some of Dickens' works, though not comparable to Dickens in literary finish or wealth of description, it has been spread out over a good deal of territory. Therefore, it becomes a little tiresome. While it is fantastic and far-fetched, yet it may interest and amuse many who like that sort of reading.

APPLIED CHEMISTRY. An Elementary Textbook for Secondary Schools. By Fredus N. Peters, Ph.O.; Instructor in Chemistry in Central High School, Kansas City, Missouri; author of "Chemistry for Nurses," etc. Illustrated. Cloth, 460 pages. \$3.50. C. V. Mosby Company, Publishers, St. Louis, 1922.

So often a textbook on one of the sciences is dry and uninteresting. As such it fails to appeal to students in general. A realization of this fact has led Professor Peters to present a textbook on chemistry which though covering the essential facts also has included a description which has made the text interesting. In fact the book is something more than a textbook for it furnishes a knowledge of chemistry applicable in almost every line of human endeavor. We heartily commend the work for the purposes for which it was written.

DIPHTHERIA PREVENTION AMONG CHILDREN OF PRESCHOOL AGE

The campaign of last summer, reported by Abraham Zingher, New York (*Journal A. M. A.*, Feb. 17, 1923), to reach the children of preschool age was a logical sequence to the extensive work that was carried out in the public schools of New York city. More than 800,000 homes had been reached with the literature on diphtheria prevention. In the boroughs of Manhattan and the Bronx alone, about 150,000 school children were given the Schick test, and those showing a positive reaction received the injections of toxin-antitoxin. An almost equal number were tested in Brooklyn and Queens. Repeated newspaper publicity had also been of some value. In most of the homes in which there were children, the parents knew what modern diphtheria prevention meant. Many of them asked us where they could take their younger children to have them immunized

against diphtheria. The work among children of preschool age, including those between six months and six years of age, was started July 1, and carried out during the months of July and August and the first two weeks of September. In Manhattan and the Bronx, the injections were given in all the baby health stations of the department of health, in five similar stations of the New York Diet Kitchen Association, and in many of the mothers and babies' playgrounds located during the summer in the play yards of the public schools. This campaign led to the following conclusions: (1) The active immunization with toxin-antitoxin of all children of preschool age (from six months to six years) is of fundamental importance in any general campaign of diphtheria prevention and control. (2) To reach these young children, the health officer can utilize, in larger cities, the baby health stations, day

(Continued on Advertising Page xx)

Avoid Breakage at the Knot

Armour's

Non-Boilable Surgical Catgut Ligatures

SUPRARENALIN SOLUTION 1:1000

Astringent and Hemostatic

The incomparable Preparation, water white, stable and non-irritating.

1 oz. g. s. bottles

SUPRARENALIN OINTMENT 1:1000

Bland with lasting effects.

5/8 oz. tubes



They possess every quality the surgeon looks for, tensile strength, pliability, smoothness, absolute sterility. They are made from lambs' gut selected especially for surgical purposes.

We can supply—

Non-Boilable Plain and Chromic, (10, 20, 30 day) 000, 00, 0, 1, 2, 3 and 4, 60-inch lengths.

Non-Boilable, Iodized Ligatures, 00, 0, 1, 2, 3 and 4, 60-inch.

Also

Boilable, Plain and Chromic, (10, 20, 30 day) 000, 00, 0, 1, 2, 3 and 4, 60-inch and 20-inch.

The **PREMIER** Product of Posterior Pituitary active principle.

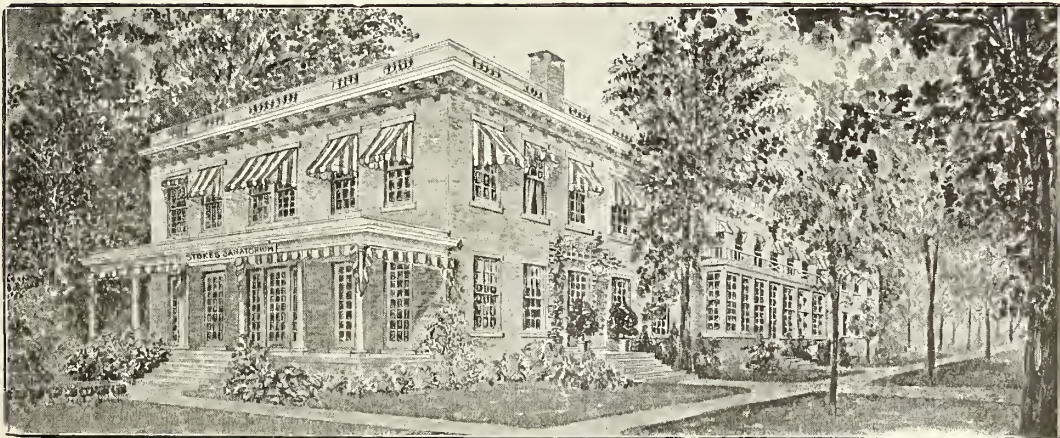
PITUITARY LIQUID (Armour)

Free from preservatives, physiologically standardized 1 c. c. ampoules surgical, 1/2 c. c. obstetrical. Boxes of six. A reliable oxytocic. Indicated in surgical shock and post partum hemorrhage and after abdominal operations to restore peristalsis.

ARMOUR AND COMPANY

CHICAGO

DR. STOKES SANATORIUM



HOME FOR THE INCURABLE INSANE, AGED AND INFIRM

A strictly modern sanatorium, fully equipped for the scientific treatment of all nervous and mental affections. Situation retired and accessible.

Alcoholic and Drug Habit Treated by the Gradual Reduction Method Only

An addition of thirty rooms has lately been added to our already large sanatorium. This makes it possible for us to separate all male and female mental patients. For details write

DR. STOKES SANATORIUM

923 Cherokee Road

EDGAR W. STOKES, M.D., Supt.

Louisville, Kentucky

(Continued from page 74)

nurseries, mothers and babies' playgrounds, infant asylums, clinics for children, and similar agencies. (3) It is of even greater importance to have private physicians take up this work among the young children in their private practice. (4) Preliminary work in the school will help by spreading in the homes the knowledge of these newer methods of diphtheria prevention. (5) The high percentage of positive Schick reactions among children of preschool age indicates, under many conditions, the advisability of simplifying the procedure of immunization by omitting the preliminary Schick test in this group and giving the toxin-antitoxin injections to all children between six months and six years of age. These children should not be pronounced immune to diphtheria after the injections of toxin-antitoxin until they show a negative Schick reaction. This test might be carried out conveniently by the school physician when the children begin to go to school. (6) The injections of toxin-antitoxin produce very little local constitutional disturbance in young children.

THE EARLY TREATMENT OF CANCER

The cancer problem of a community is not how many operative cures have been reported from various surgical centers, but how late cases receive treatment, and the results of treatment, in that particular community. With this point in view, an exhibit was attempted bearing on the treatment of the disease at Harper Hospital, as a cross section of an average situation. As there were no figures of final three or five year cures, data were compiled for some of the commoner cancers, showing the percentage of total admissions for cancer in which radical treatment at the time of operation could be given, and how many patients survived operation; that is, the number of patients in whom treatment offered a chance of cure. A rough estimate of cures could then be made, based on the reports from the Mayo Clinic of the percentage of resections in which patients remained cured five years. Figures were also available regarding the length of time symptoms were noted, and from these some of the difficulties of early diagnosis can be discussed. The data reported by Harry C. Saltzstein, Detroit (*Journal A. M. A.*, Feb. 17, 1923), are from Harper Hospital records, for the years 1918-1921, and are presented arranged for stomach, colon, rectum and breast. In the group of cases analyzed, probable cures did not exceed 1.5 per cent. of total hospital admissions for stomach cancer; 6 per cent. for colon, and 6 per cent. for rectum. In 80 per cent. of breast cases there was already involvement of the axilla, with the probable prognosis of from 15 to 25 per cent. of cures. Early rather than classical symptoms must be stressed in consid-

ering gastro-intestinal cancer, if cases are to be seen earlier. As it is more difficult to diagnose gastro-intestinal cancer, it is likewise more difficult for the public to respond to warnings for gastro-intestinal cancer than for external growths. Ten per cent. of the patients examined at several different clinics in response to cancer week publicity had cancer. Another 12 or 13 per cent. had precancerous lesions.

SUDDEN DEATH IN SCARLET FEVER

During a period of nine years (1913-1921), 2,322 patients with scarlet fever were treated at the Durand Hospital, with a total mortality of eighty-five, or 3.7 per cent. In two instances, death occurred suddenly and unexpectedly with only slight premonitory signs, and when each patient appeared to be on the road to convalescence. These two cases are reported in detail by T. F. Krauss, Chicago (*Journal A. M. A.*, February 17, 1923). The virus or toxins of scarlet fever seem to have an especially deleterious effect on the heart in some cases, as Welch and Shamberg point out. In those reported by Gouget and Deschaux, by Weil and Mouriquand, and also in the author's, direct action on the myocardium is apparent. Broadbent is inclined to believe that it has its action on the heart ganglions. No evidence was found in the author's case to bear out this view. Since grave myocardial lesions may not be apparent clinically, and since in many of these cases death has followed some slight physical exertion, it would seem that absolute rest in bed is indicated in all cases of scarlet fever, especially during the acute stages, and more particularly in those in which one may suspect myocardial lesions.

A SKIN CANCER FOLLOWING EXPOSURE TO RADIUM

The case of a patient who worked with roentgen rays in his practice from 1905 to 1917, but not since then, is reported by Ward J. MacNeal and George S. Willis, New York (*Journal A. M. A.*, Feb. 17, 1923). Precautions for self-protection were carefully employed. From 1912 to June, 1920, he handled radium, without precautions for self-protection, in small amounts up to 1915, but in quite large amounts from 1915 to 1920, from 200 to 365 mg. in individual tubes, taken between the right thumb and forefinger almost every day. Various changes, which may be ascribed to the exposure to radium, began to be observed late in 1918, and since early in 1920 the skin changes have required constant care. In September, 1922, a fissure on the ball of the right thumb manifested a peculiar and extremely painful alteration in character, and on excision in October this lesion proved to be a squamous-cell carcinoma.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XVI

MARCH 15, 1923

NUMBER 3

ORIGINAL ARTICLES

IN MEMORIAM OF DR. ALBERT CARL KIMBERLIN AND DR. FRANK BARBOUR WYNN*

DR. WM. N. WISHARD
INDIANAPOLIS

We are met today to pay a tribute of affection to two notable citizens of Indiana, both of whom were eminent physicians.

In placing these bronze tablets on the walls of this hospital and dedicating them to the memory of Drs. Kimberlin and Wynn, we are trying to give visible expression to the enduring and indelible record of high service which they wrought. Much of that service was rendered within these walls, but more of it elsewhere.

In the past fourteen and a half years, since this institution was established, the major part of their hospital service has been rendered here. They were both keenly interested in this institution from its inception and watched its development with affectionate interest and contributed in a very large measure to its success.

Their labors and their passings from earth's activities were co-incident, or nearly so. It is only thirteen months ago today since Dr. Kimberlin passed to his reward. A little over seven months later, on July 27th, 1922, he was followed by his long time friend and co-worker, Dr. Wynn. The tablet to Dr. Kimberlin reads:

ALBERT C. KIMBERLIN, M.D.
1863-1921

SKILLED IN HEALING. STEADFAST IN SERVICE
AND FRIENDSHIP

Shortly after Dr. Kimberlin's death the Methodist Hospital Clinical Research Society and the hospital authorities decided that it would be a fitting thing to express in some way the high esteem and great love of his fellows for him and this tablet was decided upon and prepared.

(*) Memorial Address on the occasion of the Unveiling of Tablets to the Memory of Dr. Albert Carl Kimberlin and Dr. Frank Barbour Wynn at the Methodist Hospital, Indianapolis, Indiana, on January 14, 1923.

It is of especial interest to us and to all who knew these two fine men to know that the wording on the tablet to Dr. Kimberlin was written by Dr. Wynn. The tablet was finished and received some months ago and it was decided to delay its unveiling until the preparation of a similar and suitable expression of our affection for Dr. Wynn, who had meanwhile followed his dear friend and co-worker "to that bourne from which no traveler returns."

Dr. Albert Carl Kimberlin was born January 20, 1863. He was the son of William and Abigail Kimberlin. He had one sister and five brothers. Four of the latter are still living. At the age of fourteen his father died and he, being the second son, and his elder brother an invalid, assumed very largely the responsibilities of the family and management of the farm. He was educated in the country school and at the age of eighteen or nineteen began teaching school. A year later he took up the study of medicine. His family, including his mother and an uncle, strongly advised against his undertaking the study of medicine but he was steadfast and unswerving in his determination to become a physician. This steadfastness and singleness of purpose were characteristics which dominated his entire career. He made the money himself to defray the expenses of his medical education. He entered the Medical College of Indiana in the fall of 1885, graduating in the class of 1887 and served the following year as interne in the Indianapolis City Hospital and on leaving the latter institution he entered the practice of medicine in this city.

He was married August 17, 1892, to Miss Mary Lampard, who survives him.

Shortly after entering the practice of medicine he was appointed demonstrator of anatomy in the Indiana Dental College and subsequently was made professor of anatomy in this institution and was at the head of its department of anatomy for eleven years. During this period he was made lecturer on internal medicine in his Alma Mater and subsequently professor of clinical medicine, which position he held at the time the Medical College of Indiana became the Medical Department of Indiana University, and thereafter held this chair continuously in the

latter institution until his death. He was for several years a member of the Indianapolis Board of Health. He had been honored by the Indianapolis Medical Society as both its secretary and its president, and later had been president of the Indiana State Medical Association. He had represented the Indianapolis Medical Society in the House of Delegates of the Indiana State Medical Association, and also in the House of Delegates of the American Medical Association. For several years preceding his death he devoted himself exclusively to internal medicine, laying special emphasis upon cardio-vascular diseases.

He has served all the hospitals in this city, but his greatest clinical work was done in the City Hospital as a member of the attending staff, and later in the Methodist Hospital. Dr. Wynn said of him:

"Whilst in his work as an internist he brought the tremendous aid of his vast clinical experience, he never allowed this to befog his vision for other diagnostic helps. He was eager to collaborate. The large consultative practice which he did bore eloquent testimony to his ability, the wisdom of his counsel, and the sympathy and helpful attitude which he always showed toward his conferees."

I first met Dr. Kimberlin in the winter of 1885. My attention was called to him by Dr. George F. Edenharter, who was then a member of the City Council and a member of the City Hospital Board (of which I was superintendent), and was also a student in the Medical College of Indiana. I needed a drug clerk for the institution and Dr. Edenharter told me an incident in relation to Dr. Kimberlin that at once aroused my interest. I requested him to ask Dr. Kimberlin to come out and see me. Dr. Edenharter spoke of Dr. Kimberlin as a country boy who was unused to the ways of the city, who was simple in his habits, honest and upright, an excellent student and earnestly pursuing his work, and said that owing to his guileless sincerity he had been led by a mischievous fellow student into doing something which he did not understand or appreciate at the time and which he deeply regretted. He said it made Dr. Kimberlin very unhappy, and that the following morning he arose early and taking an early train, went out to Fisher's Station and walked across country to the old farm and told his mother all about it. He returned immediately with her blessing, happy and contented to pursue his work. I was so interested in this story and its details, and in Dr. Kimberlin himself when I met him, that I was more than glad to give him the position as drug clerk which afforded him his board and a small salary and which still gave him time to pursue his work at the medical school. He asked me a

little later if I would not become his preceptor. It was an honor and privilege to do so. Our relations ever afterwards were much as those of a father and son. He used to come out to the hospital on his bicycle, one of the old time models, one wheel which was very high and the other quite small, but which maintained sufficient speed to enable him to attend his medical school work and yet to spend considerable time at the hospital. Every member of the medical school faculty and of the hospital consulting staff, and every officer and employee and patient in the institution dearly loved him and affectionately spoke of him as "Allie Kimberlin." He was always a student and a wonderfully efficient and industrious one. I recall his coming to my office one day, not long after he had left the hospital, and stating that he had been keenly conscious of his general educational deficiencies at the time he entered the medical school. He asked me to suggest a teacher in history and literature, which I was glad to do, and he pursued his private studies in this direction for some years until his practice became large enough to occupy all his time.

He held, at the time of his death, a very enviable position. To his professional brethren, to his students and to his patients and to the public hospitals of Indianapolis he has been a wise counselor and loyal friend to whom we have all turned with hope and confidence. I know of no one who can quite take his place. We are all richer and better for having known him.

As a consultant in internal medicine the profession of Indiana and adjoining states will feel his loss almost as keenly as we do. I never knew a physician to call him in consultation or meet him for the first time who did not entertain for him an unusual quality of respect and confidence. Most of them felt that he was already an old friend, and he became a fast friend of the great majority.

He was tolerant of the opinions of others and yet clear and firm in his own views. I was early impressed with his perfect candor when a medical student, and later as a young practitioner, and in more mature years I have never known him to fail to frankly declare himself a sincere believer in the Christian religion. Neither have I ever known him to criticize the religious views of others.

As a Christian gentleman, an unusually wise and efficient physician, as a personal friend and a rare type of citizen, he stood to those of us who knew him intimately somewhat in a class alone, or at least as one who blended the elements of goodness, gentleness, greatness and love in a rare way.

DR. FRANK BARBOUR WYNN.

The next tablet which we have unveiled today

illustrates most forcibly the saying that "death loves a shining mark." It reads:

FRANK B. WYNN, M.D., D.S.C.

1860-1922

EMINENT PHYSICIAN, TEACHER,
CITIZEN. A LOVER OF NATURE

Dr. Wynn was born near Brookville, Indiana, in 1860. He was graduated from DePauw University in 1883, and was granted the degree of Master of Arts in Chemistry by that school in 1886. In 1885 he was graduated in medicine from the Medical College of Ohio, following which he served as an intern in the Good Samaritan Hospital. After five years spent in general, special, and insane hospital practice, he spent the years 1892 and 1893 in Vienna, Berlin, London and Paris, giving emphasis to work in internal medicine, diagnosis, and pathology. Locating in Indianapolis in the fall of 1893, he was selected as the first city sanitarian of this city. At about the same time he became identified with the Department of Pathology of the Medical College of Indiana, with which he was connected many years. On June 25, 1895, he married Miss Carrie Louise Arnold at Dayton, Ohio, who with their son, Dr. James Wynn of this city, survives him. The latter is an honored member of the teaching staff of the Indiana University School of Medicine, and to him I am indebted for part of the data here given. About 1895 or 1896 he induced the Indianapolis Medical Society to set aside one night in each month for case reports and for the presentation of pathological specimens. This feature of the Society's work has been valuable to it and it has been continued ever since. In 1898 he organized and conducted the pathologic exhibit of the Indiana State Medical Association, and this part of the Association's work was of such importance and size and excellence that in 1899 the Association appropriated money and directed Dr. Wynn to take the Indiana exhibit to that year's session of the American Medical Association which met at Columbus, Ohio. This venture was so well received by the National Organization that it resulted the succeeding year in the founding of the scientific exhibit, a department which is now recognized as a prominent and important feature of the Association's work, and for many years Dr. Wynn served as director of this American Medical Association exhibit. In 1909 he was awarded a gold medal by the Association for a tuberculosis exhibit. He was first vice-president of the American Medical Association for 1921; served his State Association as President in 1914 and 1915; was President of the Mississippi Valley Medical Association in 1920; and since 1895 has held the chair of professor of medicine in the Indiana University Medical School. He was a fellow of the American College of Physicians,

and just a month prior to his death was made an honorary Doctor of Science by his Alma Mater, DePauw University.

Aside from his activities in medical societies and our medical school, Dr. Wynn did considerable writing. Among his nontechnical articles are those on the "Physician," which ran the past two years in THE JOURNAL of the Indiana State Medical Association. Other shorter works are "The Mountain Queen" (dedicated to the Mazamas, July 4, 1915), "The Campfire," "Hail to Indiana," "My Boy," "Sleep," etc. A list of some of Dr. Wynn's more recent scientific publications follows:

Tuberculosis Exhibit and Cabinet, *J. A. M. A.* 1909, liii, 946. Human Immunity in Tuberculosis, *Colorado St. Med. Jr.* 1904, x, 116. Digitalis and Cardiac Hypertrophy, *J. A. M. A.* 1914, xliii, 164. Report of the Scientific Exhibit, *J. A. M. A.*, 1914, xliii, 828. Diagnosis and Treatment of Incipient Skin Cancer, *Lancet Clinic*, 1905, lv., 429. Plexiform Neurofibroma, *J. A. M. A.* 1906, xlvi, 500. X-Ray Treatment of Skin Tuberculosis, *Am. Jr. Derm. and G-U Diseases*, 1906 x, III. Leukemia Case Reports, *Journ. of Ind. State Med. Assn.* 1908, i, 58. Public Health Exhibits for Permanent Instillation, *J. A. M. A.* 1911, lvii, 1282. Report of Early Salvarsan Use, *Journ. Ind. State Med. Assn.* 1911, iv, 293. Public Health Exhibits, *J. A. M. A.* 1913, lvi, 294. Acetanilid Poisoning, *J. A. M. A.* 1907, xlix, 1037. Renal Tuberculosis, *Journ. Ind. State Med. Assoc.* 14; 33, 1921. Pulmonary Tuberculosis Lesions, *ibid*, 10:15, 1917. Psychic Factors in Temperature, etc., *J. A. M. A.* 73, 31, July 5, 1919.

Dr. Wynn was a great lover of nature, and was a member and President of the Indiana Nature Study Club, the Mazamas, etc. His taste for mountaineering was evidently acquired during the Switzerland-spent vacation days of his post graduate study. The Jungfrau and Mt. Blanc were among his Swiss ascents. An idea of his mountain-climbing activities in this country can be gained from the list of ascents engraved on the silver plate adorning the handle of his ice ax. The mountains and dates are: Mt. Hood, 1904; Mt. Washington, 1906; Mt. Mitchell, 1907; Whiteface, 1908; Mt. Massive, 1909; Mt. Stephen, 1911; Mt. Jackson, 1912; Mt. Temple and Eagle's Peak, 1913; Mt. Ranier, 1914 (first ascent via Winthrop Glacier, made with the Mazamas); Mt. Shasta, 1915. Because of a flaw this ax was not used by Dr. Wynn in many Glacier Park climbs of more recent date. In 1912 he ascended Jackson and Gunsight Mountains; in 1919 Going-to-the-Sun and Mt. Grinnell; in 1920 Mt. Henry, Rising Wolf, Mt. Edward, Mt. Gould, Mt. Cleveland, and unsuccessfully attempted the Little Matterhorn; in 1921 Stark Peak, Mt. Reynolds, Mt.

Jackson, and unsuccessfully attempted Mt. Wilbur, getting within a few hundred feet of the precipitous summit. In 1922 he hoped to succeed in scaling Mt. Wilbur, having carefully mapped out what seemed a feasible course. It was in a preliminary climb on Siyeh Mountain that he met his death.

Dr. Wynn was a man of many public interests. He was president of the Indiana Historical Society. In 1911 he was appointed chairman of the Indiana Centennial Commission in which capacity he served until after the Centennial Celebration in 1916. Recently he was active in putting under way the Lincoln Memorial Association. During the war he repeatedly tried to get into active service but was refused on account of his age. This was a bitter disappointment and preyed on his mind heavily. As an equivalent he spent a number of months in the Surgeon-General's office in Washington, serving as a "dollar-a-year" man. He was also an esteemed member of the State Conservation Commission. The beautiful tribute of this organization to his memory is brief enough to warrant quoting in full:

"Multis Ille Bonis Flebilis Occidit.

FRANK BARBOUR WYNN

May 28, 1860
Franklin Co.,
Indiana

July 27, 1922
Mt. Siyeh,
Montana

Not to lament the dead or solace grief with empty hands, but to acknowledge the commonwealth's vast debt to one of her foremost sons who, clinging to his state with all the fibres of a pure heart and a lofty mind, representing by tradition and inheritance the best of a great formative past, brought health, happiness and understanding through the skill of his profession and the magic of his soul to those he knew and loved best, the men, women and children of his own Indiana, we register mournfully the irreparable loss of a collaborator, a counselor and a friend."

On the evening of the 25th of last July Dr. Wynn and I were sitting on the porch of the Many Glacier Hotel looking across a little lake at the mountains beyond. In the distance were two large mountains several miles apart which were connected by a high ridge known as the Garden Wall. Suddenly he put his hand upon my shoulder and said, "Oh Doctor, do you see the window in the Garden Wall?" I looked where he pointed and saw the rays of the setting sun on the other side of the lake shining brilliantly through Nature's window in the picturesque garden wall. He became quite enthusiastic as he described this great connecting ridge between the two mountains and the window and how it was all formed. As he talked a large group of tourists gathered around and

became intensely interested in what he said and asked him many questions. He talked on far into the twilight and when I bowed him good-night I did not realize that it was for the last time. The next morning early he started with Dr. Goddard of Columbus, Ohio, for the ascent of Mt. Siyeh. The following morning the sad tragedy occurred.

From the day he came to Indianapolis to open an office with our beloved Dr. Theodore Potter in the old Sayles Building on Ohio Street, where the Post Office now stands, until that last evening on the porch of the Many Glacier Hotel, our friendship was intimate and unbroken.

Many organizations with which he was actively and helpfully connected have given earnest expression of their high regard for his varied and remarkable attainments and each one of them has but expressed the simple truth.

SIMILARITIES

There were many striking similarities in the lives of these two men. Dr. Kimberlin and Dr. Wynn were both native Hoosier boys. Each was born and reared on a farm. Both were fond of outdoor life. Theodore Roosevelt said:

"The men and women on the farms stand for what is fundamentally best and most needed in our American life. To supply the city with fresh blood, clean bodies and clear brains that can endure the terrific strain of modern life, we need the development of men in the open country, who will be in the future, as in the past, the stay and strength of the nation in time of war, and its guiding and controlling spirit in time of peace."

Some 40 years ago I became interested in the fact that a large proportion of our physicians in Indianapolis were country-bred. I made a somewhat careful survey of the question at the time and found that about 90% of those then practicing in the city had been born, or had spent part or all of their early life on a farm. A poll of the General Assembly of the Presbyterian Church was taken at the meeting in 1917. Over 600 ministers were present. It was discovered that 82% of them, including some of the most distinguished men of the denomination, were born and reared in the country. Dr. Washington Gladden investigated eighty-eight of the most successful business men of Springfield, Ohio. He discovered that 95% of them were born and reared in the country.

Each of our two friends was a Christian gentleman. They belonged to the same religious denomination, both being Methodists. They were devoted to their religious life as well as their home life. They were both broad-minded men, eminent as teachers, writers and practitioners of medicine. Both were internists. It was not a coincidence or accident that these

two great teachers of clinical medicine were ardent lovers of nature. The foundation of Clinical Medicine is based upon "the art of careful observation." The great fathers of Clinical Medicine, such as John Hunter, and Sydenham, were naturalists, avid students of all the phenomena of nature. If one is to learn from nature he does so by the process of careful and painstaking observation of her laws and various manifestations. The same art of careful observation which the naturalist acquires must be used by the successful practitioners of Clinical Medicine. Indeed, the true physician and the naturalist are working in closely related fields, both dealing with phenomena, for disease can only be rightly understood when viewed as one of the processes of nature. From Hippocrates to Osler the great outstanding figures in the history of Medicine have been men wise and skilled in Clinical Medicine. The modern emphasis on the technician and the specialist, joined as it often is with the spirit of commercialism, will not alone develop men of discriminating judgment, clear vision and broad humanitarianism.

Our two friends were taken in active life, in the fullness of their activities and success. Though absent they are accounted for.

Both seem near us today and we do not say, as we recall them that "the past rises before us as a dream." On the contrary, it is a very acute consciousness of their presence and their activities, of their splendid characters and our devoted attachment to them. The past and the present blend as a vivid reality and we do not count them gone. So long as anyone lives who had the rare privilege of knowing them, they will still live and in the history of the contribution made by the medical profession to the advancement and betterment of the State of Indiana, their names will occupy a prominent place. It was said of Abraham Lincoln by one of the members of his Cabinet, as he stood by the bedside of that great man at the moment his spirit took its flight, "He belongs to history." Certainly each of them has made his impress on the history of this city, of this state and beyond the borders of this state, and also made it in a very large way. To those of us who knew and loved them and who cannot give them up there is a profound feeling of their nearness and the feeling that we shall meet again,

"For love will hope and faith will trust,
Since He who knows our need is just,
That somehow, somewhere, meet we must."

In their name and in their memory I challenge the popular belief that scientific study necessarily leads to skepticism. Their lives, their works, their simple faith and eminent attainments splendidly disprove such argument. They believed in the unity of the universe.

They recognized that the act of creation involved the existence of a Creator. They saw through and beyond the smoke screen of doubt which many honest scientists have labeled with various bewildering terms. Through and beyond this barrier they saw the harmony of creation and the beneficence of the Creator. They saw no contradiction with evolution rightly interpreted and the biological miracle of the birth and vicarious atonement of the Great Physician. They were men of science, men of earnest effort, men of great faith and abundant charity.

And now "beyond life's late afternoon" in the full fruition of the faith to which they steadfastly adhered seeing as they do face to face, and "not through a glass darkly," rejoicing as they do in the fullness of life and with their hearts and minds attuned to the heavenly harmonies, could either of them speak to us he would comfort us by approving the words of the poet who said:

"And friends, dear friends, when it must be
That this low breath is gone from me;
And round my bier you come to weep
Let one most loving of you all
Say, 'Not a tear must o'er him fall,
He giveth His beloved sleep'."

CATARACT EXTRACTION AND COMPLICATIONS*

W. F. HUGHES, M. D.
INDIANAPOLIS

The extraction of cataract has been and probably is the most frequently discussed subject of ophthalmology. Volumes have been written. This can only mean that the ideal procedure has not been fully developed or has not been agreed upon, universally. The many methods devised for its performance are confusing to the beginner in selecting a particular one to adopt. No difference what method is used, nor how skillfully the operation is performed, failures come, often when least expected. Consequently, a searching study of the various methods should be made by each operator for the purpose of adopting the operation or parts of the operation which have been proved by experience to be the most satisfactory. The individual operator must necessarily consider his own technical ability and experience, the nature of the cataract to be removed and the characteristics of the patient, in selecting the mode of procedure in each particular case.

A few important facts, or possible complications, should be kept in mind by the operator in his selection of the method for the extraction. In making the incision the ciliary body must

(*) Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the Muncie session, September, 1922.

be carefully avoided to prevent destructive cyclitis and sympathetic ophthalmia, rupture of the hyaloid with loss of vitreous, and prolapse of the iris. Also in making the incision the danger of placing it too far from the ciliary body thereby producing a flap which is unable to support itself properly, with its possible reflection and delayed healing, or destruction from its poor nourishment must be kept in mind.

However, many variations in the location of the corneal incision are made by the different operators. Incisions entirely within the cornea are practiced by Smith and Wright. The most popular incision consists of a sclero-corneal incision with a conjunctival flap. This incision gives slightly more danger of vitreous loss as well as prolapse of the iris. However, this danger, in the minds of most operators, is outweighed by the improved condition for rapid healing.

Most conservatives prefer the iridectomy. In dealing with the capsule and lens, we find almost as many different views as operators. Dr. Homer Smith introduced the practice of opening the capsule by a horizontal incision, with the knife needle, from six to twelve hours before the operation. Dr. Savage advocates the horizontal opening of the capsule only a short time before the operation. Two advantages are claimed for this procedure. First, the reduction of secondary cataracts through the crucial incision which allows the angles to fold themselves out of the way. Second, in immature cataracts the aqueous will enter the incision and loosen the lens from its capsule thereby facilitating its removal with little or no cortical matter remaining in the anterior chamber. The writer's rather limited experience with this procedure has been very gratifying.

Dr. J. W. Wright, of Columbus, Ohio, wrote an article in 1885 on the removal of the capsule and the lens together. In my opinion he should be given the credit for the intra-capsular operation. His method is radically different from all other procedures. He used a small corneal incision at a fifteen degree angle to the iris. Pressure is made on the upper edge of the wound for the expression of the lens. He claims this method permits the lens to pass through a much smaller opening and materially aids in the prevention of vitreous loss. The writer saw the operation performed twice by his assistant. It certainly seemed a meritorious operation.

The Smith intra-capsular operation, a few years ago, promised a great advance in ophthalmic surgery. However, the fact that many enthusiastic operators for this method have practically abandoned its use is not encouraging. Also, the immediate and final results in the operations done by Smith, himself, in this coun-

try, have shown a rather high percentage of disastrous complications.

Within the past two years the removal of the lens in its capsule by suction has been revived and is thought, by many operators, to be the safest and most satisfactory intra-capsular operation.

Dr. Barriquer, of Spain, an operator of most extraordinary skill, has devised a technic, including a specially built motor, which gives a vibratory suction. He regards vibrations as a very important part of the technique. The writer has used the instrument in nine extractions. In two cases the capsule was ruptured and the lens was removed by the old method. In one of these cases the patient was very unruly and considerable time and manipulation was required to complete the operation. This case developed a striped keratitis and will require an optical iridectomy. In one case a moderate amount of vitreous was lost after the extraction. I am satisfied that the method had nothing to do with the loss of vitreous but think it was caused by a contraction of the extra-ocular muscles. Seven cases healed without any complication whatever, with 20/25 or better vision.

The writer is convinced that the method, in selected cases, with an experienced operator, adds little, if any, danger. The method should not be used with unruly patients or complicated cataracts. Being an electrical instrument it is subject to all the defects of such appliances. The operator must be prepared to discard the instrument at all times and proceed with the extra-capsular. The writer's chief trouble with the instrument has been in securing the proper suction. Several Americans are experimenting for a needed simplification of the instrument.

No difference what method is used in the extraction, complications are apt to occur both in the operation and during the healing process. Expulsive hemorrhage is probably the most disastrous, uncontrollable complication which occurs in connection with ophthalmic surgery. The writer has encountered this horrible experience twice. In each instance the impression was forced upon me that the routine preparation of the patient might have been a factor in the cause. In the first case the hemorrhage followed a sudden violent projectile vomiting as the patient was being transferred from the operating room to the ward. She had been given a pre-operative injection of morphine. The second hemorrhage occurred a few hours after the operation and was associated with a violent emesis. The patient attributed the catastrophe to the omission of the accustomed cup of black coffee from her breakfast.

A third case, which I observed as an assistant, took place immediately after the extraction. In

this case the etiology seemed to be related to a high blood pressure and atheromatous arteries. As general preventive measures, the writer insists on the patient remaining very quiet for a sufficient period prior to the operation to relax the spasm of the muscular and arterial systems; avoiding the use of any pre-operative narcotic, and keeping the aged patient in as near his regular routine of life as possible. In cases where one eye has been lost from this cause or where the general condition of the patient indicates this accident as a definite possibility, special precautions should be taken. Milk diet, mercurial purging, calcium lactate, elevation of the head, heat to the extremities and even venesection immediately before the operation should be a definite part of the preparation. Suturing the wound after the active hemorrhage has ceased will usually prevent an enucleation.

Hemorrhage in the anterior chamber is an aggravating complication in the extra-capsular expression, but acts as a serious hindrance for the Barriquer method.

Squeezing the lids probably spoils more extractions than all other immediate complications combined. It is best prevented by the lid elevators and injections to partially paralyze the orbicularis muscle.

Occasionally harm comes from the contraction of the extra-ocular muscles. To prevent this spasm of the extra-ocular muscles, Anglucci recommends the holding of the superior rectus with the fixation forceps. McReynolds uses a suture under the muscle.

Recently the writer anxiously did a beautiful, simple intra-capsular extraction by watching the lens and capsule gradually force themselves through the pupil into the anterior chamber immediately after the incision with absolutely no squeezing of the lids.

Opening an eye with a degenerated zonule and fluid vitreous presents a serious situation and calls for the immediate use of the loop or similar instrument. Prompt healing is almost an essential for a successful extraction. Collins says, "Some incisions heal better than others. If the wound does not heal promptly, a down growth of epithelium may even enter the anterior chamber, spread over the whole cavity, and cause a blocking of the angle of filtration, thus causing a condition of glaucoma."

The conjunctiva and lachrymal sac must be searched carefully for infection. Septic causes away from the eye should also be searched for, such as teeth, nose and throat. Aseptic precautions and sterilization of instruments have greatly diminished the frequency of infection. A series of Moorefield's in 1876 showed a per-

centage of 6.2, another series in 1894 showed 1.79, while one in 1912 showed 1.15. The conjunctiva practically always contains infectious material. Out of a series of one hundred cases in Moorefield's, one was pronounced bacteriologically clean. This case became infected after operation. However, precautions must be taken.

The antiseptic irrigation of the conjunctival sac may, by irritation of the conjunctiva, lead to later increased production of micro-organisms. However, the wound will usually have healed before this time has been reached.

Bandaging the eye for twenty-four hours, prior to the operation, is a questionable procedure. Experiments have shown virulent organisms, after bandaging that were not detected before. The writer depends upon a one to two thousand bichloride of mercury irrigation immediately before the operation. It is followed by a flushing with sterile water.

The treatment of delayed union consists of antiseptics, caustics, actual cautery, sub-conjunctival injections, vaccines, salvarsan, etc.

Staub in a book on inflammation of the eye caused by resorption of crystalline lens matter in eye lymph, deals with the toxic influence exercised upon the eye by lens matter in solution. He believes it to be of great importance, often causing inflammation, which he calls phacogenetic, and perhaps even glaucoma. He suggests the possibility that while a great quantity may cause chronic or acute inflammation, even small quantities continually penetrating into the fluids of the eye might exercise a slight irritation and set up adhesive inflammation of the angle of the anterior chamber. In young people the lens matter is much less toxic than in the aged. He believes that trauma to the iris has little significance but the origin of the inflammation is to be sought in the chemical action of the remains of the crystalline lens. In most eyes where the capsule has been ruptured posterior adhesions are to be found, while after the intra-capsular extraction, or in the very old, where the lens leaves the capsule in its entirety, no synechiae appear. He also suggests this phacogenetic inflammation as a cause for sympathetic inflammation. If Staub's theory is correct, traumatic cataracts should be removed to prevent iridocyclitis.

Prolapse of the iris is a later complication which is usually not detected until too late for immediate attention. It produces a slow, dangerous healing.

Mental derangement is an occasional complication which requires immediate and energetic attention. The condition is usually mild and transient if promptly treated. Butler remarks that patients who become permanently insane

have generally shown symptoms of insanity before operation and a strong hereditary taint frequently can be discovered. He regards the radical change in their surroundings as a factor. He attributes no significance to the double bandage as a causal factor. The writer had this complication in a lady past eighty after a needling in the hospital. With the immediate removal to her home all symptoms disappeared. The original operation was done at her home without any mental disturbance whatever.

The chief cause of secondary operations is the extraction of unripe lenses. An unripe lens does not separate as completely from the capsule as a ripe one. Much of the lens material adheres to the capsule and undergoes proliferation with the resulting dense capsular membrane. Imperfect toilet of the eye is frequently a causal factor. The imperfect laceration or removal of the anterior capsule is a factor which should be kept in mind by the operator as a danger. The writer prefers the capsule forceps as the most satisfactory instrument. The secondary operation is much safer done after all signs of inflammation have been free from the eye, although the capsule is much tougher.

Ordinarily the knife needle is the instrument selected. It should be selected on the basis of sharpness, shape and proper proportions between shank and blade. The curved blade is a requirement for the writer. Unless distinct bands can be severed, the crucial incision is much more often satisfactory. Whether two or one needle is used should depend on the individual operator. Whatever method is used, care should be taken to injure the vitreous as little as possible. Whenever the membrane has become extremely dense, or complicating iritis has produced an occlusion of the pupil, a more extensive operation is demanded since the necessary dragging on the ciliary body by the knife needle would invite permanent damage to the eye. Opening of the anterior chamber with the keratome and the use of scissors is usually the method of choice. When there is a tendency of the vitreous to escape, a sliding conjunctival flap will materially aid in rapid healing.

However, we must remember that the needling of an eye or the performance of an iridotomy involves a certain amount of risk.

In conclusion it can be said that while the final results are usually satisfactory and often brilliant, yet a cataract extraction is a very delicate procedure which should be done only under the best possible conditions obtainable and should receive the most skillful effort and best judgment of the ophthalmic surgeon.

DISCUSSION

DR. F. A. MORRISON (Indianapolis): I desire

to speak of some things not especially mentioned by Doctor Hughes. In my experience loss of vitreous has occurred very frequently from the use of poorly sharpened instruments. This is especially true of the point of the cataract knife. I do not depend upon the instrument-maker, but sharpen my own instruments. I have found the best test of the sharpness of the point of the knife is the ease with which it will penetrate the epidermic layer of a piece of kid used on the test drum. In this connection it might be said that we can get the edges of the knife too smooth. A barber once showed me this and demonstrated that a little roughness aids cutting. In using a strop to sharpen the knife it should be held fairly tight, or it will in a sense turn the edge of the knife. Even with a very sharp knife an operator will have difficulty in making a smooth and even cut because he is not careful to keep the edge of the knife in the plane of section, but allows it to turn a little to one side.

I have had no voluntary experience with the so-called Smith-Indian operation, but in a few instances have done the operation more or less accidentally, as have others. I have, however, operated upon three individuals who had the other eye operated by this method. In reading about this operation as performed by Doctor Smith and some of his followers in this country, it seemed to me all laid great stress upon the absence of pain and inflammatory reaction. All those who later came under my care complained of the great pain in healing, and one man especially remained blind in the other eye for a number of years owing to his previous experience in the way of excessive pain.

I have had no experience with the Barraquer operation. So far as I know, Doctor Hughes is the only person in our city performing it. I have heard from those who have seen him operate by this method that his results are excellent.

My experience with expulsive hemorrhage has been that where the hemorrhage came on after the patient was removed from the operating room, it was always accompanied by nausea and vomiting. If I understood Doctor Hughes, he feels the vomiting was the cause of vessel rupture. I have doubted this and have felt the vomiting was due to increased intra-ocular tension from the bleeding, and would call attention to the frequency of vomiting with acute attacks of glaucoma.

My plan of preparation of patients is about as follows: The afternoon of the day before that set for operation I dilate the pupil, then irrigate the eye with 1 to 5000 bichloride solution. The lacrimal sac is then irrigated with the same solution, even if there is no suspicion

of lacrimal disease. If there is no apparent lacrimal disease, but a history of a weeping eye or even a suspicion of this, I seal up the puncta with the cautery. The eye lashes are next trimmed off short. Finally, the lens is split after the manner of Homer Smith. White's ointment is placed in the eye and a pad applied which is not taken off until the patient reaches the operating room. The night before the operation 10 grains of chloral and 20 of bromide of potash are given, and this is repeated next morning one hour before the patient is sent to the operating room. At the moment of operation a 5 per cent. solution of cocain is dropped into both eyes at intervals of five minutes, four times. At the same time a 1 per cent. solution of novocain is injected along the upper border of the zygoma and at the lower and outer margin of the orbit. The eye is irrigated with a 1 to 5000 solution of bichloride, using a large, soft, ear syringe and forcing the solution with considerable pressure into both the fornices and canthi. Postoperative infections have practically disappeared, even though I operate upon a number of old trachomatous cases in a year. Irrigations of normal salt are used to remove debris left after the cataract comes away, and under no circumstances is prolonged rubbing of the cornea used in making the toilet of the wound.

I have no fear of trouble in dissection of the capsule remaining after an extraction, if the knives generally sold us for that purpose are *not* used. I use an old cataract knife ground down very thin and the cutting edge removed from the shank to about five millimeters of the point. With this I do not hesitate to divide the toughest membranes.

DR. G. W. SPOHN (Elkhart): I have enjoyed the paper of Dr. Hughes very much. I would like to ask the essayist a question. When he spoke of the intra-capsular operation and referred to the Smith operation, I think he meant Smith, of India. I think Dr. Green, of Dayton, Ohio, was the first man in this country to advocate the Smith operation. Both the essayist and the discussers have been alluding to another man. Green, Vail, and Fisher went to India to see Smith operate, and subsequently Smith came to this country and performed many operations. Smith is an old man now.

DR. HUGHES: Dr. Wright performed the operation before Smith.

DR. SPOHN: Smith, of India, has done more operations for cataract than any man in this country, but the conditions are entirely different in India from what they are in this country. Smith did not have any better results than Dr. Hughes or any of our men in this country who are using the ordinary operation for cataract.

DR. W. A. HOLLIS (Hartford City): Doctor Egan (of Logansport) and I attended a meeting of the Ohio State Medical Society at which Doctor Smith was the guest of honor in the Ophthalmological Section. Doctor Smith gave Doctor Wright the credit of priority for doing the first intracapsular extraction, and regretted the fact that his paper was not given more publicity.

Doctor Green, of Dayton, Ohio, learned to do intracapsular extractions in India under Doctor Smith. He was with Doctor Smith for many weeks as his guest, along with several other American ophthalmologists.

DR. B. W. EGAN (Logansport): I was not able to get any after reports of the cases that were operated on in Columbus. I made a trip to Chicago to attend a meeting of the Chicago Ophthalmological Society, where a report was made on the work Smith had done in Chicago. Fisher said Doctor Smith's results were absolutely beautiful—no bad results. Another man reported on Doctor Smith's work at another hospital and gave a bad report of the results achieved. Some said his work in St. Louis was good; others maintained the results were bad.

An old soldier of our town happened to be in Dayton, Ohio, and Smith operated on the case there. Two cases out of eleven on which he operated were total failures. This man, who had been operated on some six or eight weeks when I saw him, still had quite a bit of circum corneal injection and suffered great pain. The last I saw him he was still having pain. I tried to fit him with glasses and 20/40 was the best I could get.

DR. C. J. ADAMS (Kokomo): I would like to report a case of cataract operation in a woman 55 years of age. I made a small incision, and found it necessary to enlarge the incision. I bruised the wound in getting the lens out, but I delivered the lens very nicely without any complications that I could see. The woman was a good patient and I did not have any further trouble. The eye was bandaged for five or six days, and when I took the bandage off the eye was clean and everything seemed to be doing well, except that the wound had not healed, and in fact it did not heal for a month. I did not use any procedure that might get me into further trouble, but merely kept the wound as clean as possible and finally it healed.

When she came to the office to get her glasses I was surprised. With a —50 her vision was 20/20, and with a + 50 she could see Jaeger 1. With this correction I fitted her and until about two years ago she was reading all she wished and her distant vision was good. About two years ago she came in and said her glasses were not as good as they had been. At this

time without any correction her vision was 20/100. I found with a cylinder +1, axis 90, I could advance the vision to about 20/50, and she was able to read Jaeger 1, and even finer print.

In the American Journal of Ophthalmology I noticed eight or ten months ago that an ophthalmologist in the east reported a case where the accommodation remained after the lens was removed. These cases are very interesting and I wondered if Doctor Hughes has noticed any of that character. There are only three or four reported in the literature.

DR. O. G. BRUBAKER (North Manchester): I happened to have been in Chicago when Dr. Smith was there. Unfortunately I did not see the operations he performed because the clinic was filled to overflowing. However, I heard his address at the banquet that evening, and I know something about the feelings of the members of the Chicago Ophthalmological Society at the time. Men of outstanding prominence, like Drs. Wilder and Brown, were skeptical about his work, and the reports of men of that standing were not favorable. However, Dr. Fisher came out with a very favorable report on the results of Col. Smith's work. I can understand that, knowing the feeling existing there. I heard the testimony for and against the results obtained by Smith in his operative work. I heard Dr. Bulson make the statement that we were not Indians but Americans. I have often wondered whether there is a difference between the eye of a Chinaman and the eye of an American. I have operated on the eyes of both and know whereof I speak. You can tamper with the eyes of a Chinaman and get good results, but you cannot do it with the eyes of an American.

DR. W. F. HUGHES (closing): I just want to say that the Wright operation is entirely different in every way from the Smith operation. There is no relation between the two.

As to the accommodation, I have never seen a case so marked as that described. However, I have seen a case or two where it seemed that less than the normal addition was necessary for reading. The case described is quite interesting.

RECONSTRUCTION OF PERINEAL GENITO-URINARY CHILDBIRTH INJURIES*

FRANK C. WALKER
INDIANAPOLIS

It is only within a comparatively recent period that the perineum and its anatomy, nature and functions have been properly understood. It may be said that there is no other part of the female structure that has been so poorly visualized as the real perineal supporting

parts, and as a result, errors in the prevention, diagnosis and treatment of pelvic and perineal derangements have been only too frequent. The old idea that the perineal body is only a thick triangular plug, with its base from the anus to the vaginal outlet, pointing upward between the rectum and vagina, is not entirely correct. It is much more. Instead, we find it the meeting place of vital, supporting structures as the muscles enclosed within layers of strong, fascial membranes.

Before taking up the reconstruction of any part, it is very important to have a clear mental picture of the normal relations and functions. Also it is equally as essential to see the pathological derangements as they exist in each individual case, as well as an understanding of the steps in the surgical procedures necessary to restore the parts to as nearly the original as can be done.

It seems that it is pretty well agreed now that some of the former standard operations for the treatment of perineal laceration, relaxations and malpositions were merely vaginal resections of variable depth and extent, completely ignoring the principles of support, and without locating and embracing the vital parts. This led to failures in the restoration and improvement of the function. These failures were due to mistaken anatomical conceptions which led to errors in the reconstruction operations.

I am convinced that a very large per cent. of these badly damaged cases we see are due directly to poor obstetrics. By poor obstetrics I mean that the attending physician has not been attending during the very trying and important moments of the last of the second stage. There is more malpractice in obstetrics than in any other branch of practice. Any physician who is too busy or not enough concerned to devote himself absolutely to assisting a woman in a very helpful way at this critical time has no business trying to do confinement work. It is here that the prophylactic treatment of childbirth perineo-pelvic derangements begins. Many of these wrecks can be prevented by properly guarding the perineum and governing the progress of labor. The class of obstetrics taught in our best medical schools at this time will soon lead to a marked decrease in this variety of pathology.

A number of things are to be taken into consideration when confronted with a patient suffering from pelvic, mechanical derangements. One must endeavor to do the best thing for the individual case, all things that may enter into the final, remote result being carefully judged. The patient as a living, concerned human being must not be overlooked in our enthusiasm over

(*) Presented before the Indiana State Medical Association at the Muncie session, September, 1922.

the pathology and its treatment. Age is an important consideration in the outlining of a treatment procedure. A woman of twenty-five should be treated differently from one of forty or past the menopause. The younger woman must be managed with the idea of further childbearing in mind. In the older woman this is not likely to have much weight. Also, in the older patient there are more likely to be associated conditions as rectocele, cystocele, uterine prolapse, a deeply lacerated, infected cervix with persistent discharge, forming an ideal precancerous condition. Backache and a variety of reflex neurotic manifestations are very common. The presence of these lesions in the various combinations usually indicate a complete hysterectomy with reconstruction and replacement of the remaining parts. The object is to do enough to relieve the patient of the cause of her suffering, make her well and useful and relieved of the necessity of returning to the physician frequently with pelvic complaints.

The question often arises as to what is the best thing to do in young women whose health has been undermined, their usefulness impaired and their genital tracts badly damaged. Is it best to reconstruct these women and make it impossible for them to have further pregnancies, regain their health and be useful to their families, or is it best to allow a bad condition to grow worse. These are questions requiring keen judgment. Social and economic conditions many times have a bearing. Concurrent diseases in other parts of the body may influence the selection of the method of treatment, as well as the character, degree and symptoms resulting from the local lesions.

Every surgeon knows the difficulties to be overcome in doing perineal, pelvic work. It is practically impossible to make the external part of the operative field clean and keep it so. Also, it is well known that a certain portion of these cases, even if never so well done from a mechanical, technical standpoint, are going to fail partially or completely in their purpose. It is the object in the remainder of this paper to emphasize if I can some of the essential points that, when carried out carefully, add greatly to the successful anatomical and functional results.

Pre-operative Care. This is very important. These are elective cases as far as the time of operation is concerned. Sufficient care and time should be taken before the operation is done to put the patient in the very best condition. Our zeal to get at the real pathology should not cause the surgeon to overlook this preliminary step. The patient should be in the hospital at least twenty-four and better thirty-six hours before operation. The bowels must be gently evacu-

ated, but by no means to exhaustion, which is always wrong, and too frequently done. High colonic flushings every eight hours put the lower gut in good condition. The cervix and vaginal mucosa should be cleaned with antiseptic douches three or four times daily. If there has been a prolonged endocervicitis with free, purulent discharge, strong iodine applications are indicated. After the usual vulvar preparation the external parts should be washed with soap and water at least twice daily. In cases where the perineum has been soiled continuously by discharge, it is good treatment to use boric acid or bichloride packs on the perineum. Lack of these simple precautions account for some of the infections and failures. Thirty minutes before going to the surgery, an H-M-C No. 1 is given per needle, followed by a gas or a gas induction ether anesthesia.

Operation. The various steps in the technic of the operative procedures depend upon the conditions to be met. Given a case near or past the menopause with perineal and cervical lacerations, relaxation, associated cystocele, rectocele and uterine decensus, we usually have a definite indication to do a complete hysterectomy. This pathological picture covers a large number of this class of cases. The uterus can serve no useful purpose and is usually a menace or may become one. To leave a diseased cervix or uterus behind is poor surgical judgment. Hysterectomy may be done by either one of two well known ways. The one should be selected that offers the best access to the parts and the greatest likelihood of permanent, lasting good. I want especially to direct attention to the very great importance in both methods of thorough, complete dissection and exposure. This is very essential. The bladder must be dissected from its cervical and vaginal attachments and delivered well up into the pelvis. This is sometimes very difficult to do in long standing cases. Care in starting the dissection to find the proper lines of cleavage make it much easier. If the work is done per vaginum with complete hysterectomy, the dissection must be sufficiently extensive to permit a good suture grasp of the peri-vesical fascia, and the attachment of the broad and round ligaments to the vagina in such a way as to make a strong support for the base and posterior surface of the bladder. This is very essential and if poorly done a recurrence is likely. Any slack in the vaginal wall should be removed.

If the work is done through the abdomen, deep dissection must be made between the vagina and bladder to permit raising the base of the bladder and anchoring it higher. The peri-vesical tissue must be united behind the bladder and to the vagina. Attention must be

given to the building up of a strong supra-vaginal attachment for the round and broad ligaments. This bridges across the pelvis from side to side. The rectum is pulled up higher in the pelvis and attached to the posterior surface of the lower portion of the uterus or to the vaginal stump. This closes the cul-de-sac and prevents the small intestines from pushing down in the posterior part of the pelvic cavity. Unit-ing the uretero-sacral ligaments between the rectum and the genital tract helps further to build up the upper pelvic swing and holds the vagina up and backward. These steps direct the lower abdominal contents and pressure to the front where they can be supported with less strain to the tissues. As a last step in the intra-abdominal work, the bladder should be elevated well upon the vaginal-ligamentous stump and attached with sutures. The pelvic peritoneum covers the entire field. Good union following these procedures constructs an upper pelvic floor through which hernia are not likely to occur.

In those cases where hysterectomy is not considered advisable, and where there is uterine mal-position, it is best to use some of the suspension methods. In these procedures care must be made to get ample dissection and sufficient pelvic visceral elevation. The suture closure of the post-uterine pouch is good practice in such cases. Tube resection is necessary in this operation when the patient is in the child-bearing period.

Perineal Reconstruction. Repair of the perineum is one of the most frequent operations indicated in gynecological practice. It consists in the readjustment to as nearly normal as possible, the parts which have had their integrity and supporting functions altered by child-birth injuries.

The tissues are picked up on each side with a pair of catch forceps about two-thirds of the way along the inner border of the labia minora. The muco-cutaneous junction is incised between the forceps and the vaginal mucosa raised by blunt dissection, aided by the snipping and spreading action of the scissors. It is very important to extend this dissection high into the recto-vaginal septum and well down beside the rectum. If this is not done it is impossible to unite the proper structures in the correct place by suture. Shallow exposure explains the recurrence in a number of these cases. The gauze covered index finger makes a splendid dissecting instrument for the deep work. The pubo-coccygeus borders of the levator ani muscles should be easily palpable and seen in the operative field. Good exposure makes the suturing much easier and effective. Bleeding vessels

should be ligated to prevent post-operative hemorrhage with separation of the parts, possible infection and poor union.

Cases complicated with third degree lacerations add to the difficulties of dissection with more possibility of infection. The rectal mucosa should be closed with the knots tied in the rectum. Sphincter ani muscle union should be made with a slight over-lapping if possible.

The success of this kind of work depends in no small measure upon the suture material and the method of applying it. The smallest amount of suture should be used that is compatible with good co-aptation and healing. Each strand should be tested separately as to its tensile strength. A single suture failure may cause a poor result. I have found number two, twenty day chromic gut the best.

In closing the perineal wound, the first step is directed to the rectum. It should be displaced upward and backward. In marked cases with rectocele and relaxation a suspension suture should be passed from the upper part of the vaginal canal outward into the recto-vaginal septum, and a firm grasp of rectal and perirectal tissue secured and the needle passed out into the vaginal canal and tied, after the method of Spaulding. This is a very helpful step as it anchors the anterior rectal wall high on the posterior vaginal wall which acts as a support. Care must be taken in applying these sutures to get the proper places united.

The second suture or sutures are placed from side to side high up in the recto-vaginal septum. They must grasp the peri-vaginal and perirectal tissues in such fashion as to form a good, wide separating wedge between the vagina and the gut. This step prevents the development of an entero-cele through the posterior vaginal fornix or the protrusion of the rectum into the vagina above the perineal body. A sufficient number of sutures should be placed to build up the septum down to the level of the levator ani. This wedge supports both rectum and vagina.

The next sutures unite real supporting structures of the perineum. Suture introduction is not always easy. Especially is this true where the sutures are introduced from without inward. This method does not insure a firm grasp of the proper structures. The following technic is easy, simple and does make sure the co-aptation of the tissues. A three-quarter, curved, round needle, armed with a suture, is grasped with the needle holder in the right hand. The convex part of the needle is toward the operative field. The left index finger pushes the rectum back and upward and hooks over the edge of the left levator ani and fascia low down on the side of the rectum, acting as a guide for the passing of the needle. The holder is given a left to right

turn, forcing the needle to take up a deep bite and emerge about three-eighths or one-half inch from the incision edge. The needle on the other end of the suture is passed through the recto-vaginal septum tissues sufficiently to draw it down and close any dead space when tied. The needle is then grasped in the left hand with the holder and the right index finger acting as the guide on the patient's right side. The sutures are introduced by a right to left turn of the hand emerging the needle on the right side of the wound. As many such sutures are introduced about one-half inch apart as are needed to make the proper closure. Seldom more than three are necessary. Each suture must be tied with a secure knot under moderate tissue tension. The skin and mucosa should be closed with buried sutures if possible as it leaves a clean perineal surface without sutures to act as avenues to carry in infection.

Post-operative Care. Everyone knows how likely the perineal tissues are to break down and give a very indifferent result with a rough scar, even after the most thorough work. To prevent this I consider the constant care of a good, conscientious nurse as a prime necessity to satisfactory result. All other things considered, it is more important than in many abdominal cases. The perineum must be kept dry and clean. Catheterization should be done every eight hours, as slight over-distension of the bladder often produces cystitis. An ounce of a one per cent. solution of argyrol should be introduced into the bladder through the catheter. It will prevent cystitis, and should be done for at least three or four days, or until healing is well started. After this, urine passing over the field will do no harm. The surgeon should inspect the perineum each day to detect and meet early any evidence of irritation. Any sign of retention should have immediate drainage. These simple measures prevent failures. The bowels ought to be kept at rest for from four to six days or longer if necessary. Enema and oil injections are useful in producing soft, easy evacuations which should be encouraged at first. The patient must be kept in bed for three weeks, and when first allowed up, a properly fitted perineal pad should support the perineum. The surgeon will profit much by examination of his cases at frequent intervals during the first year.

The results in this work depend in a great measure upon the minute attention to detail and watchful care. If the medical profession would do its full duty to this class of patients there would be fewer wrecks and old women at forty and fifty years of age.

To emphasize briefly, these points are of importance: (1) All pelvic and perineal reconstruction work is based upon the principle of

support. (2) Thorough pre-operative preparation. (3) Extensive dissection exposure. (4) Anchoring of the bladder and rectum high. (5) Building of high and wide recto-vaginal septum. (6) Uniting of the levator ani and fascia, and (7) Careful, watchful after-care.

DISCUSSION

DR. A. A. RANG (Washington): The essayist has pointed out that you must know your anatomy in this particular operation, and before beginning the operation you must visualize each individual step and what you intend to have after your work is completed. You can close an abdominal wound in a haphazard manner and possibly get by without a hernia; but in a perineorrhaphy unless you get exact apposition of the like tissues you must necessarily fall short of the results you are expecting.

It seems to me the Doctor is a little bit rough on the general practitioners. We are all inclined to blame the other fellow too much. I think perineal lacerations are too general to lay them at the door of the general practitioner. He does not always have facilities at hand. If there is an unusually large head and an inelastic perineum, or a combination of both, you will probably have a laceration. A great many times it is impossible to avoid it, even in a hospital with all the facilities that can be thought of. Then a great many times we see a perineum that might be diagnosed as lacerated, and upon careful examination it may be a relaxed perineum due to extreme loss of muscle tone similar to such a condition in the abdominal muscles. Considering everything, I think it is more satisfactory to everybody concerned to speak of this perineal condition as a relaxation.

Concerning the preparation of patients, several years ago we learned that in abdominal work the more simple our preparation and the less irritation and scrubbing of the skin, the fewer our skin infections, and now our preparation for abdominal operations is very simple. I believe this holds good in surgery of the vagina. The vagina is the natural habitat for varied organisms that normally belong there. Operations should be delayed until you have a normal vagina—not septic, but normal. Then carry out a simple, non-traumatic preparation on the morning of the operation.

DR. J. E. WEINSTEIN (Terre Haute): Doctor Walker is perfectly right in his opening statement that we do not know as much as we should about the female perineum. We know more about the male perineum than the female. I admit it is hard to understand, its anatomy is intricate and its supporting bodies are confusing. This is a subject which is more or less interesting to all surgeons, and I think we

should have more papers along the line of Doctor Walker's—trying to stamp out the fallacy of the statement of Doctor Robert Morris that this is an office boy's operation. It is an important operation, and a difficult operation when properly done.

I am in perfect accord with Doctor Rang in his statement about too much preparation of these patients. I think Nature is very kind to us in this region as in surgery about the mouth.

One point about after care. The doctor spoke of catheterization every eight hours. I do not like catheterization at any time if we can possibly avoid it. It has been my experience that we have had better results by the use of the indwelling catheter for three days, simple irrigation with boric acid, and if necessary giving a little hexamethylen. The incidence of cystitis has been very low—much lower than when trusting the catheters to a floor nurse.

In cystocele, the Doctor did not speak of the interposition operation. I think in selected cases (and this is a class of cases we usually can select) it is an ideal operation for support of the bladder. We must be careful that we have not a long cervix, that we have not a badly lacerated cervix, and that we have a fundus sufficiently large to block the pelvic opening so that there is no possibility of hernia following, or of the uterus acting as a wedge and working its way down and producing the same condition we had.

The old operation—simply taking out a little fascia and cellular tissue and depending upon scar tissue to make the floor of the vagina—has passed. I think we all understand the necessity of deep dissection, the picking up of the muscles and thorough co-aptation, seeing that the rectum is pushed back and that there is thorough co-aptation of the mucous membrane of the vagina so that the normal secretions do not reach the raw areas and produce infection.

I do not think it is necessary to use non-absorbable sutures. I have found the long time chronic gut gives just as good results, because if we get infection, a suture left in forty months will not do more good than a suture lasting twenty days.

DR. GEORGE D. MARSHALL (Kokomo): In perineorrhaphy I think the best thing to use is tenaculum forceps. These do not bruise the tissues when it is necessary to grasp the levator ani muscle on either side, and you can see the muscle and know how much you have and its condition. You can bring the forceps together and tell exactly what apposition you will have of the muscle before you introduce the suture. I think it is rather difficult to use the finger and needle and know exactly what apposition you will have because the tissues are so lax.

The Doctor spoke about relaxed support there. I have a case under observation at the present time in which there is a rectocele in a woman who has never borne a child.

DR. CHARLES J. ROTHSCILD (Fort Wayne): The paper divides itself into prophylaxis and operation. There has been little said about prophylaxis, but I believe a large number of injuries during childbirth are preventable. When we have a better idea of obstetrics, when patients are examined more carefully, when that great bugbear, the routine use of forceps, is put aside, there will be less of this work to do. Unfortunately, many times forceps are applied where there is no reason for using them. That could be largely prevented, and these consequent lacerations and deformities would be a thing of the past.

DR. G. B. JACKSON (Indianapolis): No doubt the question just raised is pertinent to this subject. There is a question in my mind, however, as to its resting upon the use or non-use of forceps. I believe it rests more upon the obstetrician understanding the proposition of perineal injury or pelvic injury. Much depends upon the rapidity of the birth and the direction which the presenting member takes. The better the obstetrician the less injury there will be in a given case, because he will look after these two factors—usually under anaesthesia—retardation if necessary, and traction or advance in the proper direction. Unfortunately, childbirth is not in the hands of obstetricians. It is in the hands of general practitioners in most cases, and so long as that is the case we will have relatively more of these injuries than we would were childbirth in the hands of expert obstetricians. Then, too, if these injuries were repaired, it would of course obviate the necessity for this discussion; but few are properly repaired for the same reason—they are not in the hands of obstetricians—men capable of diagnosing and taking care of them. That, I believe, is the crux of the situation so far as prevention of this condition is concerned.

A little point in regard to the repair of obstetrical perineal injuries. I have just recently used a stitch that I think is interesting and based upon the proper mechanical principles. We all know the trouble with perineal stitches in obstetrical repairs is that we cannot allow for the oedema which is to occur, and so the stitch is usually too tight, causing pain; it cuts into the skin and is difficult to remove. In the last five cases I have had to repair I have placed a silkworm gut in the old-fashioned way, shot at the skin on either side, then I place a small rubber band over the shots, so there is constant elastic tension, giving and taking for the swelling.

DR. WALTER U. KENNEDY (New Castle): The age has a great deal to do with the success of these operations. The woman who is comparatively young, who has had but one or two children, whose tissues are elastic, responds easily to the flap splitting operation; but the older woman who has had a number of children, whose lacerations date back perhaps twenty years, does not respond to this particular type of operation, and I think we have overlooked a simple procedure which acts well on these people—a procedure described by Pryor. A simple incision is made back of the cervix and packed lightly with gauze, with a roll of gauze above the cervix lying transversely, thus forming a bar pessary holding the cervix completely back—illustrating the anatomical fact that you cannot have a descending uterus so long as the cervix points backward. In the older cases where the bladder is down, to do a total hysterectomy has seemed to me a bad operation. If we can use the uterus and cervix to hold the other tissues it would be better than a mutilating operation of any sort.

In women past the menopause, with ultra severe prolapsus, the Murphy bat-wing operation, or a total vaginal occlusion, is preferable.

DR. JAMES S. SHAFFER (Terre Haute): Dr. Walker seems to think that forceps are responsible for most traumatized and lacerated parts of the female generative organs and perineum in childbirth, and no doubt they are responsible for many. But I believe the indiscriminate use of pituitrin causes more lacerations of the perineum than forceps. I mean this, do not be too quick to give pituitrin in childbirth, especially when the head is well down on the perineum.

DR. F. C. WALKER (closing): I quite agree with Doctor Rang and Doctor Weinstein that if we had better obstetrics we would have fewer of these cases. Many of them are due to poor care in the last two hours of delivery. The doctor too frequently is not present at that time, which is wrong.

In regard to the age, I had particular reference to doing a hysterectomy in those cases where there is a bad cervix.

ESSENTIALS IN DIAGNOSIS AND TREATMENT OF PULMONARY TUBERCULOSIS*

J. H. STYGALL

Medical Director, Indiana Tuberculosis Assn.
INDIANAPOLIS

The diagnosis of tuberculosis is not always a simple matter, and we should use all possible methods in arriving at a conclusion. These should include a careful history, physical ex-

amination, laboratory tests and x-ray examination.

Under the history we must first consider the family and contact history. That is if the patient has been in intimate contact with a known case of tuberculosis, it forms one link in the chain and if the exposure was in childhood it makes a stronger link. In my clinic work I find that 50 per cent. of the cases of tuberculosis give a history of intimate contact with an active case of the disease, and I am sure this percentage would be higher if a more rigid history was always taken.

The personal history is very important, and we must lay particular stress on pulmonary hemorrhage, pleurisy with effusion, fistula in ano and scrofula. Any one of these is pretty conclusive evidence of active tuberculosis at the time it occurred.

Under present illness the most important symptoms are, cough and expectoration lasting over six weeks, a tired feeling after slight exertion, loss of weight, soreness or pain in the chest, loss of strength, night sweats and digestive disturbance. Of course a history of positive sputum should always be inquired for and is pretty definite evidence of past disease although the patient or laboratory is occasionally mistaken. Fever is a very important symptom of active disease and if there is no fever present the disease is usually not active. The temperature and pulse should be taken every two hours for two weeks and the thermometer should always be left in for five minutes as the real one minute thermometer is a rare find.

In the typical early active case the temperature on arising will be subnormal and this means below 97.8 F. The normal temperature of course varies in different individuals but as a rule a persistent afternoon temperature of 99 F. or over with a subnormal temperature in the morning is a sign of toxemia which is apt to be due to tuberculosis. The pulse is usually accelerated in the active disease and no case can be pronounced arrested if the pulse continues above normal. This also varies with the individual but as a general rule 85 in a man and 90 in a woman may be considered abnormal.

The examination of the patient should take considerable time and I always examine the mouth first because I find that diseased tonsils and teeth are frequently the cause of the patient's symptoms. Sinus and nasal disease should also be examined for this purpose. The patient should then be stripped to the waist and facing the light.

Starting with inspection we note the general appearance of the patient, if he looks well, is he well nourished and if the skin looks healthy. Abnormal depressions or deformities should also

(*) Read at Tenth District Medical Association meeting, Valparaiso, June 8, 1922.

be looked for. The expansion should be noted, and lagging or diminished expansion of one top is suspicious of disease on that side.

Palpation is sometimes of help and we should particularly note if there is any muscle spasm at either top as it is sometimes present over the diseased lung. The apex beat is located and the tactile fremitus is now elicited. It is increased with consolidation or cavitation of the lung but it must be remembered that it is normally increased at the right apex due to the closer proximity of the trachea to the right apex.

Percussion is a great help and should be constantly employed to keep the ear in tune. The two sides are compared and dullness above the second rib and third dorsal spine on either side is very suspicious of tuberculosis; however, we must remember that normally there is slight dullness at the right apex. When there is definite dullness the finger feels a sense of resistance which is great aid to the ear. In doubtful cases it is well to percuss out Kronigs isthmus which is the narrow band of resonance at the apex and this will be narrowed on the diseased side. The complementary space will also be narrowed and higher on the affected side.

We now come to auscultation which is the most important means at our disposal for discovering intrathoracic disease. First we listen to the heart because sometimes a heart lesion is the cause of all the symptoms. Then we listen for changes in the breath sounds and I always have the patient breathe through the mouth because this makes the breath changes much easier to detect. Granular breathing is often a very early sign but cannot be depended on and I think that feeble breathing is of greater significance. Feeble breathing may mean congestion, pleural thickening or respiratory inhibition, any of which is usually due to tuberculosis. This usually escapes detection and the first abnormal breathing noted is broncho-vesicular breathing. This is normally found to a slight extent at the right apex, and experience alone teaches us to distinguish when it is abnormal. As a general rule, however, a prolonged and higher pitched expiration at the left apex or extending below the right apex is abnormal and suspicious of tuberculosis.

The whispered voice is very important and should always be elicited during expiration. It is normally slightly increased at the right apex and here again we must depend on experience to teach us when it is abnormally increased. It is of great value in detecting consolidation or cavitation.

We now listen for rales and always use the expiratory cough to bring them out. This is best done by a moderate expiration followed by

a fairly deep cough, then a deep inspiration and the breathing should be through the mouth. The bowl of the stethoscope should be firmly held on the chest during the whole procedure or some of the rales would be missed. In the typical case the rales are heard as a moderately coarse shower directly after the cough at the beginning of inspiration. However, they may be heard during any part of inspiration and occasionally during expiration. They also vary as to size and moisture according to the stage of the disease. They must be persistent to be of significance and if heard only at the base of the lung are not usually due to tuberculosis unless the sputum is positive. However, persistent rales heard above the second rib and third dorsal spine are practically always due to tuberculosis whether the sputum is positive or not. Rales when present are not so hard to hear with the proper procedure but ruling out extraneous sounds is the hardest part of the chest examination and is the cause of the most mistakes in diagnosis. These may be due to joint crackles, muscle sounds, swallowing, dry skin or faulty handling of the stethoscope and can only be eliminated by experience.

The x-ray is an invaluable aid in diagnosis of tuberculosis and is particularly valuable in determining the extent of the involvement. Steroscopic plates should be used and too much should not be expected of the x-ray man. He can describe the various densities that he sees but it is almost impossible for him to state if the lesion is active.

Mottling above the second rib and third dorsal spine is practically always due to tuberculosis. As a general rule the more sharply defined the mottled areas are, the more healing has taken place and the ill defined areas with a cottony appearance are suggestive of activity. We must remember that the pathologically active case of tuberculosis having definite rales and x-ray fuzziness is often a quiescent case and by leading a careful life is able to carry on for years without breaking down. It is the clinically active case that requires treatment and this can only be determined by symptoms of fever, rapid pulse, hemoptysis, lack of endurance, loss of weight, night sweats or pleurisy, any one of which is a danger signal and shows that the case requires treatment. Cough, expectoration and a positive sputum do not necessarily mean clinical activity although they usually do.

The sputum examination is the easiest and surest method of detecting pulmonary tuberculosis and strange to say is seldom used until the patient has been ill for months. It will be found in most active cases of tuberculosis if persistently looked for and one should never be satisfied in a suspicious case until at least twenty sputum

examinations have been found negative. It is of course needless to say that the sputum must come from the lungs and should be the first raised in the morning.

The tuberculin tests are of value in ruling out tuberculosis but when positive do not distinguish between tuberculous infection and disease. The subcutaneous test is the most reliable and if there is an increase of physical signs or x-ray signs during a reaction it probably means that the lesion is active. Unfortunately some men are still diagnosing tuberculosis by a positive tuberculin reaction and great injustice is often done to the patient, when perhaps all that is needed is a tonsilectomy or the extraction of some abscessed teeth. The complement fixation test is not much better and does not always distinguish between tuberculous infection which is well nigh universal and the disease which about two per cent. of us have. About ten per cent. of apparently normal people will give a 4 plus complement fixation. However, the test is being refined and will perhaps become of great value.

I won't go into the details of childhood tuberculosis but wish to emphasize the fact that the lesion in childhood is frequently at the base and children have many acute chest conditions which frequently simulate tuberculosis. However, I think that any child that has been intimately exposed to tuberculosis and is not doing well, should be treated as a case of tuberculosis. Of course all defects should be corrected before beginning treatment if the patient's condition permits. A positive tuberculin reaction in a child under five is suspicious of active tuberculosis and under two is almost always indicative of active disease.

In a short paper I cannot cover all the ground in the treatment of pulmonary tuberculosis, but will try to emphasize certain fundamentals which are sometimes forgotten.

In the first place we know that there is no perfect climate to treat tuberculosis and the results obtained in Indiana are as good as in Colorado if the same treatment is carried out. Furthermore, a patient sent far from home with insufficient funds will not do as well as he would at home where his money will last longer and he will get better attention. Therefore we should never recommend a distant climate unless the patient has plenty of money and even in that case should advise giving the home climate a fair trial.

It is always best to send a patient to a sanatorium for the first months of treatment. There they learn the routine of the cure and the sanitary precautions which makes them co-operate better when they return to your care.

Rest is by far the most important thing in the treatment of tuberculosis. Any case hav-

ing fever, rapid pulse, hemoptysis, night sweats, pleurisy or other active symptoms should be kept absolutely at bed rest until all active symptoms have left, and then may be gradually allowed to sit up to their meals. The patient or his associate can be taught to take the pulse and temperature, and a daily record at 8:00, 4:00 and 7:00 should be kept for physician's guidance.

Exercise should never be allowed until all active symptoms have disappeared and the weight is back to normal. Then five minute walks may be permitted which can be gradually increased if there is no return of active symptoms or loss of weight.

The patient should take the cure in the fresh air and should sleep out if possible. However, it is not necessary to sacrifice the comfort of the patient when the weather is particularly severe.

The diet should be well balanced and these patients can handle a full diet even though running a high temperature. However, they should never be stuffed.

It is well to give a glass of milk at each meal and bedtime, and if they do not gain satisfactorily one can be added between meals. The bowels must be regulated and it is often necessary to give laxatives during the rest cure.

Drugs should be dispensed with as much as possible as they often upset the stomach and they have no effect on the disease. Iron helps when the hemoglobin is low and creosote sometimes stimulates the appetite and diminishes the expectoration. There are innumerable other drugs used but in my opinion it is better not to use any in most cases.

Tuberculin will do no harm if carefully given and sometimes is beneficial. It should never be given if the patient has any fever because it aggravates the condition in this case. It helps to keep the patient under supervision and perhaps has some psychic effect. Autogenous vaccines are sometimes of value when there is a mixed infection; however, they must be very carefully given.

Artificial pneumothorax is of great value in about five per cent. of cases where the lesion is one sided and there are no strong adhesions. It should never be attempted until the rest cure has failed to check the disease and should be given by an experienced operator.

When the lesion is more on one side it is well to have the patient lie on the more active side as much as possible. Webb and Forster at Colorado Springs have shown by x-ray studies that the under lung will relax after the first hour of that position, and the effect will be somewhat like an artificial pneumothorax.

In conclusion it might be well to emphasize:

1. That numerous sputum examinations should be made in all suspicious cases.
2. Pulmonary hemorrhage and pleurisy with effusion are always due to tuberculosis until proven to the contrary.
3. Definite, persistent rales or x-ray motting above the second rib and third dorsal spine are always due to tuberculosis except in very rare instances.
4. Definite rales at the bases with no signs in the tops are not due to tuberculosis unless there is a positive sputum.
5. Absolute rest is the only specific we have for active tuberculosis.
6. Tuberculin should never be given to patients with fever.

DISEASES AND INJURIES OF THE HIP JOINT*

G. D. MARSHALL
KOKOMO

Many of the conditions affecting the hip joint will be mentioned only in connection with differential diagnosis as time and space permit.

The hip is a ball and socket joint, and capable of a wide range of motion. Muscle tone is the stabilizing agent, and the integrity of the joint depends largely on muscle tone.

There are some well defined details to be followed in the examination of the hip, which should be carried out in a methodical manner, and yield signs of established accuracy. In measuring for length the patient must lie straight, with both legs in the same position with relation to a right angle of the pelvis. Measure from the anterior superior spines of the ilium to the internal malleolus, care being taken that both legs are in the same degree of abduction and flexion. Apparent shortening may be due to abduction, and the apparently short leg really the longer one. Nelaton's line: a line drawn from the anterior superior spine of the ilium to the tuberosity of the ischium. In fracture of the neck of the femur and dorsal dislocation, the great trochanter is always above this line. These measurements can be secured without moving or manipulating the injured hip, and should be secured without causing pain or muscle spasm in fracture of the neck of femur, as manipulation increases the deformity.

Mobility is tested by moving the legs. Spasm holds the leg in abduction and flexion due to stronger muscle groups. Abduction cannot be secured in fracture of the neck or in dorsal dislocation until reduction is secured. Flexion is rarely limited except by readily observed cause, such as adenitis or abscess. Flexion de-

formity must always be guarded against in amputation stumps and tuberculous hip joints. Extension is limited in tuberculous hips and lumbar spine, due to spasm of the psoas and iliac muscles. Abnormal mobility is frequent in poliomyelitis, the upward travel being limited by the fascialata, and luxation should be prevented by weight bearing braces, taking the weight on the tuber ischii, until the muscles regain tone to keep the head in the socket. When the dislocation becomes painful it is evident that recovery is progressing.

Snapping Hips—An apparent abnormal mobility of the hip and a snapping sound can be produced by rotating the thigh inward, while slightly flexed. This is due to an anomaly of the tendon of the gluteus maximus muscle, the tendon being longer than usual and inserted lower on the femur, so that it snaps when slipping over the great trochanter. The size of the trochanteric bursa seems to have no part in producing the phenomena as it varies in size where the snapping occurs. These snapping hips were exploited by malingerers in the army and some of them could produce some rather startling sounds. It has been my good fortune to see the snapping produced by electrical stimulation of the muscle, while the patient was under anaesthesia and the parts exposed by dissection. It is not a disability and calls for no treatment.

Osteochondritis deformans juvenalis — Perthes' disease—Legg-Calve disease: Characterized by a flattening of the upper femoral epiphysis. The etiology is not known. Legg reports observation of 75 cases with known trauma in 66 per cent. of the cases. The pathology apparently is due to a disturbance of the circulation at the epiphyseal line; occurs in healthy, well-developed children, frequently following trauma. The symptoms are a limp, moderate pain, temperature above 99. Leucocytes may be 1200, but usually not above 8500. X-ray shows deformity of the epiphysis, characterized by a flattening of the epiphysis. May often be confused with a tuberculous hip. Prognosis good, with rest of the joint.

Traumatic arthritis of the hip may simulate fracture in that there is quite complete loss of function, and is frequently observed in older patients who have suffered a fall, striking on the hip. The classical signs of fracture, however, are absent, and there is no displacement of the trochanter. The recovery from a severe trauma may be slow, and require rest of the joint by the application of an abduction splint.

Osteoarthritis of the joint may follow trauma, with the organization of exudates and delay the recovery for a period of several weeks.

(*) Presented before the Indiana State Medical Association at the Muncie session, September, 1922.

Fracture of the neck of the femur is of rather frequent occurrence, especially in elderly patients, and it is always to be kept in mind if a patient of advanced years falls and is unable to arise and walk. This may be due to trauma to the joint, however, and the specific signs of fracture should be sought. The x-ray of the hip is especially valuable in such an injury as the character of the injury greatly modifies the treatment and it is readily apparent that treatment by the Whitman method can not be successful in case the fracture is below the trochanter. The Whitman method of treatment of fracture of the neck of the femur is by traction on the leg and bringing the leg into abduction until the great trochanter rests against the upper rim of the acetabulum, and the application of a plaster paris cast from the nipple line to the foot, holding the leg in extreme abduction. There is no traction on the leg, as the length is secured by direct contact of the trochanter and rim of acetabulum. The Ruth method consists of the application of a Thomas splint with extension secured in the usual way, and to this is added lateral traction by means of a lateral extension secured to the bed. A Balkan frame with counter balances is used to give more freedom of movement in the bed.

The method which appeals to me as being the simplest and most effective is by use of the Bradford abduction splint. This splint consists of an open ring for the affected hip with the inner segment of the ring extending forward and upward and across the pelvis above the pubis, then continued downward and backward past the tuberosity of the ischium on the opposite side, and so elevated that it keeps the injured limb in abduction. In the application of this splint, traction is secured in the same manner as in the use of the Thomas splint, that is, by the application of adhesive plaster extending well up on the leg so that traction on the skin is distributed over as large area as possible, and passed about a block of wood beneath the foot to act as a spreader and protect the malleoli from undue pressure. A stout cord about the block and the lower end of the splint allows for the desired amount of traction. Where more traction is desired a stick is thrust between the strands of cord and by twisting very strong traction is obtained. A rest for the splint to keep it up from the bed and keep the foot in 90 degrees dorsiflexion is a requisite. The leg is supported the whole length by bands of outing flannel. A suitable frame over the bed and weights to act as counter balances give the patient increased freedom and make the nursing much easier. One of the desirable features of this splint is the utility it possesses, in that it is as effective for fracture below the trochanter

as of the neck, bearing in mind the fact that the distal end of the upper fragment is always in the position of abduction, and it is necessary to abduct the leg to secure alignment. The treatment may be ambulatory by the use of a windlass at the bottom of the splint, and an extension on the shoe of the opposite foot. Dr. Bradford has treated several cases as ambulatory with most gratifying results.

This splint is also well adapted to the treatment of tuberculous hip joints in bed patients as well as securing the requisites of abduction and traction, and is very useful in treating this condition in children.

There is one feature which may be urged as an objection, and that is the fact that the splint must fit the patient, and in many instances be made for the individual after the injury is incurred. This is true of any splint, as an ill-fitting splint is always a source of annoyance and discomfort to both the surgeon and patient.

Ridlon, after a review of 300 cases of fracture of the hip which came under his observation, states that bad treatment is worse than no treatment at all when measured in the end result regarding deformity and function, and I concur in this opinion. It is much better to wait until suitable provision can be made for the proper retention of the fracture, even if this requires 24 or 36 hours, than it is to make frantic efforts at treatment that are doomed to failure because they are not suitable to the case. The hours spent in providing proper retention apparatus is more than compensated for by the days of comfort secured by the proper reduction and retention. Where reduction and retention are secured a fracture should cause no pain except that due to muscle spasm, which is paroxysmal and subsides entirely in a few days. The popular idea that fractures must be set at once, without any regard for the proper retention of the fragments is the cause of many bad results in this work.

The application of weight-bearing braces is an absolute requisite in the management of many diseases and injuries of the hip, as fractures do not unite on any schedule time, and the degree of osteoporosis and consequent softening varies greatly in different cases, and weight bearing on this soft bone invalids an otherwise good result. Weight bearing braces should be worn for some time after the successful reduction of a congenital dorsal dislocation. What might otherwise prove a failure will be a very satisfactory result, especially in patients that have passed the most favorable age for reduction.

In cases of poliomyelitis where the hips dislocate when the body weight is thrown on them, weight bearing braces allow the overstretched

muscles to regain tone enough to prevent the luxation which otherwise occurs with each step and is limited only by the head of the femur meeting the fascia lata. These braces must be made to fit so they will not slip past the tuberosity of the ischium, as that is a natural weight bearing area.

DISCUSSION

DR. C. C. TERRY (South Bend): Treatment without knowledge of any condition is always dangerous. This is especially true in injuries and diseases of the hip joint. These conditions occur in the extremes of life at a time when skill and knowledge is required in the management of the case if a good result is to be hoped for. There are many things to be taken into consideration other than the treatment of the fracture.

We must consider the condition of the patient, whether it is advisable to keep the individual in bed in a fixed position for a period of weeks or possibly months. The condition of the myocardium and general health of the patient is important.

We do not have any fixed rule for the treatment of fractures any more than we can have a fixed rule for anything else in surgery. Often the most simple procedure is the best.

There is a great need for better x-ray work in fractures, and especially in diseases of the bone. The picture to the inexperienced may be deceiving. This statement was made yesterday in regard to gastric ulcer—that Doctor Carman finds them in 90 per cent. of the cases where ulcer is present. This is made possible by his knowledge and years of experience. The same requirements are necessary for diagnosis of early bone lesions—the surgeon should use his judgment in the treatment of each individual case and not attempt to treat them according to any fixed rule.

I am sorry that Doctor Marshall did not dwell more fully on diseases of the hip joint, as they are quite as important as the treatment of fracture in this locality.

DR. H. R. ALLEN (Indianapolis): I have no criticism to offer of Doctor Marshall's paper. Inadvertently he may have led us to think wrongly in regard to one point, and that is with reference to snapping hips. He spoke of the gluteal muscle only as the cause of snapping, and it might lead you to think it was the only cause of snapping hips. It is not. There are other causes, and those who do much orthopedic work will occasionally find a congenital dislocation in one hip and snapping hip in the other. There are several causes for the snapping which could not be enumerated in so short a paper.

DR. GEORGE D. MARSHALL (closing): I would like to urge simpler methods of diagnosis in

fracture. A lot of men will send a fracture case to the x-ray man when they do not even know which leg is longest, and what the position of the fixed bony points are. Usually the evidence that could be secured by anybody is overlooked.

With reference to snapping hips, I state practically always this is voluntary on the part of the patients—that is, there is no snapping until they choose to produce it. It is caused by the tendon of the gluteus maximus muscle slipping over the great trochanter.

I feel that a plea for more preparation for the treatment of fractures is not out of place, for the general treatment is disgraceful. Patients are put to bed with weights tied to their feet, and this treatment is just about as effective as to tie a can to a dog's tail.

SUGAR IN CEREBRO-SPINAL FLUID

A Preliminary Report upon the Quantitative Estimation of Sugar in Cerebro-Spinal Fluid: Referable Especially to Epilepsy.

DR. CHARLES D. HUMES
INDIANAPOLIS

The observation of spinal fluid has been a matter of great interest to us for many years, making its examination a part of routine in every neurological case. We have been able to make certain deductions from the varied findings. It has been particularly noted that there was an absence of Fehlings reduction in the non-convalescent state of epilepsy. For a long time only qualitative test was made. Recently a plan was conceived to estimate the quantity of sugar in spinal fluid in various neurological, psychiatric and medical conditions.

We beg to offer as a preliminary outline the following questions:

- (1) Does the cerebral spinal fluid have a physiological as well as a mechanical function?
- (2) If the cerebral spinal fluid is to be considered a filtrate, why is there not a more consistent relation between the quantity of sugar in the blood and in the spinal fluid?
- (3) Is there a distinct cerebral metabolism?
- (4) If normal spinal fluid carries glucose as its natural constituent, what is the significance of its persistent absence in the non-convulsive state of epilepsy?
- (5) What is the relation between quantitative sugar in central spinal fluid and blood in health?

These are the questions which we are attempting to solve by the laboratory procedures. Only those cases that have been completely diagnosed have been accepted.

Particular attention is called to the case of sarcoma of the brain, the difference between

the quantity of sugar in the fluid taken from the ventricle over that taken from the spine, and the marked increase over the sugar in the blood.

Again, in the case of active diabetes which shows almost three times the quantity of sugar in the blood to that of the spinal fluid.

The cases of active meningitis have invariably shown a complete absence of sugar.

We appreciate the fact that a large amount of clinical and laboratory research is demanded to make any report satisfactorily complete.

The various State Institutions have offered their assistance and we will report further to this Society about our results.

ADMINISTRATION OF NEO- ARSPHENAMINE

Without the Presence of a Third Party

FRANK W. CREGOR, M. D.,

F. M. GASTINEAU, M. D.

INDIANAPOLIS

The necessity for a technique for the administration of neo-arsphenamine in which only the physician and patient are present is very apparent. It is for this reason that this technique which we employ is being published.

Assuming that the proper sterilization has been made and the urine examined, the materials used for this technique are selected. They consist of the following articles: A bottle of fresh water, doubly distilled, room temperature; a test tube of about 20 C. C's capacity; rubber cork; one porcelain dish; one 10 C. C. Luer syringe; one 20 gauge steel needle, one and one-half inches long; a rubber tourniquet, $\frac{3}{8}$ inch in diameter, 15 to 18 inches long; plain gauze; alcohol; tincture of iodine; collodion; a pair of thumb forceps; absorbent cotton.

The patient is placed in a recumbent position, the arm is bared at the elbow, care being exercised to see that there are no clothes obstructing the circulation.

A piece of absorbent cotton is wrapped on the end of the thumb-forceps and iodine is applied over the most prominent vein to be observed on the flexor surface of the elbow. This iodine is then removed by a piece of gauze which has been saturated with alcohol.

The ampule of neo-arsphenamine, the file, the needle, and two pieces of gauze are placed in the porcelain dish and covered with alcohol. Two pieces of gauze are cut—both slightly longer than the syringe. The syringe, test tube and cork are placed on one piece of gauze; the other piece, which must be only of one thickness (two layers will obstruct the technique) is placed at the side of the syringe.

The test tube is then taken up in the hand and filled with the distilled water; the syringe

is then taken up with the left hand and with the tip resting on the ring finger, 10 C.C. of the distilled water is poured into the syringe. The test tube is then emptied and the 10 C.C. of water is returned from the syringe to the test tube. This is done to get the right quantity of water.

The ampule and file are then taken from the alcohol and the tip filed off the neo-arsphenamine ampule, powder being emptied into the test tube containing the 10 C.C. of water. The rubber cork is then fitted into the test tube which is gently agitated until the neo-arsphenamine powder has been completely dissolved.

The piece of gauze, which has been cut previously, is then taken up and one end of it placed on the ring finger of the left hand, the tip of the syringe resting on this gauze; the other end of the gauze is now brought over the mouth of the syringe, care being exercised to see that there is only one layer of the strip of gauze over the mouth of the syringe. If more than one layer of gauze is placed here, it will obstruct the escape of air as the neo-arsphenamine solution is being poured into the mouth of the syringe. When the one layer of gauze has been brought over the mouth of the syringe, it is held there, and the solution of neo-arsphenamine, now in the test tube, is filtered through this one layer of gauze into the barrel of the syringe. The layer of gauze over the mouth of the syringe, now being thrown back the piston is taken up by the right hand and inserted into the barrel of the syringe. When this has been done, the syringe is inverted, the needle is applied, the air expelled, and the injection is ready.

The operator now fastens the tourniquet about the patient's arm just above the elbow, of sufficient tautness to obstruct the venous return, but not to obstruct the arterial inflow. It is fastened by simply looping one end over the loop-knot resting on the outside of the arm. The patient being instructed to open and close the hand, will facilitate the getting into the vein with the needle. When the vein has been entered, as will be observed by the return of blood into the syringe, the left hand of the operator grasps the end of the tourniquet and pulls it from the loop; the injection is then slowly made into the vein.

At the conclusion of the injection, the operator may clear the needle by pulling a small quantity of blood back into the syringe. Then taking a piece of gauze from the alcohol, he holds it on the arm at the point where the needle enters the skin, and with a quick motion, withdraws the needle and immediately makes pressure with the alcohol-soaked-pad of gauze. A drop of collodion on the skin at the point where the needle enters, closes the technique. The final

admonition that the injection must be followed within twelve hours by a free bowel movement is now given and the patient is dismissed.

DIAGNOSIS OF EARLY SYPHILIS

From the Section on Dermatology and Syphilology, Mayo Clinic and the Mayo Foundation

Issued by the United States Public Health Service

A study of 231 cases of early syphilis, largely untreated, yields the following observations bearing on the diagnosis of early stages of the disease:

1. The diagnosis of early syphilis has become a laboratory problem, divided between the dark field examination and the Wassermann reaction. Clinical criteria, while interesting, have lost most of their final diagnostic value. The primary stage, especially, should no longer be over-emphasized in teaching.

2. The dark field examination showed 55 to 65 per cent of all genital lesions to be chancres outright.

3. In our consecutive series, irrespective of age, 66 per cent yielded positive dark fields; 80 per cent were positive the first week and none were positive after the ninth week.

4. Seventy per cent of the Wassermann tests made in the second week of the chancre were positive.

5. The dark field detected spirochete pallida in twenty-three of the twenty-four moist secondary lesions, and in five of seven Wassermann negative, early, or recurrent secondary cases.

6. The dark field on treated primary lesions is not hopeless. Eleven of seventeen cases yielded positives. Nonetheless the withholding of treatment until after repeated negative dark field examinations needs to be vigorously preached.

7. Glandular aspiration of the satellite bubo of the chancre with dark field examination of the serum yields 50 per cent positives.

8. Of eighty patients who previously had seen physicians, we found that only three had had dark field examinations, one army man, one navy man, and one civilian.

9. The practitioner's margin of error in diagnosis was 30 per cent. In 24 per cent, treatment of some kind had been instituted while no diagnosis had been given the patient.

10. "Chancroid" is still the chief diagnostic pitfall. The attitude that every genital lesion is potentially a chancre until proved otherwise is the safest for public and patient. Diagnosis of chancroid should not be made until four months after the appearance of the lesion and following

repeated negative Wassermann tests. "Cancer," "tumor," "herpes," "felon" are the masquerades of extra-genital chancres.

11. One patient had been used as a transfusion donor before coming to the clinic, while he had a chancre, and was at the height of his spirochetemia, and ten days before his secondary eruption appeared. The physician who used him as a donor had evidently made no inquiry into his condition.

12. The Wassermann test in our secondary cases yielded the following: 92 per cent positive in treated and untreated; 95.7 per cent positive in those with slight treatment; 98.5 per cent positive in those without treatment.

13. We believe the repeated positive Wassermann test in secondary syphilis is a safer guide for the inexperienced than the characteristics of the eruption. If it is negative, the dark field or the combination of findings may make the diagnosis.

14. In the aggregate 24 per cent of patients with florid secondary syphilis, a high percentage could give no history of chancre, even though their secondaries were fully developed. This included a physician with secondaries, but no sign of a primary lesion (needle prick?).

15. Women are especially apt to give no sign of a primary lesion (concealed, short duration, and so forth).

16. Macular eruptions preponderate in our secondary cases. This we believe is an effect of special attention to lighting on our part, and is of great importance where inspection is used as a clue to syphilis as in industrial and military hygiene.

17. More than half of our patients had infectious lesions when seen (68 per cent). More women than men had infectious lesions (75 per cent in contrast to 64 per cent), which makes them even more effective carriers than men. In this we are in accord with Fournier.

18. Half our patients had constitutional symptoms with secondary eruptions; much fewer in the pruruptive stage (four in twenty-eight).

19. Women show a markedly greater tendency to constitutional symptoms than men (63 per cent in contrast to 43 per cent). In this also we are in accord with Fournier.

20. The leading constitutional symptoms are sore throat (53 per cent), headache and head pain (31 per cent).

21. Combination of mild fever, sweats, loss of weight, asthenia, gastro-intestinal symptoms, nervous irritability, arthritic and myalgic pains with anemia are frequent and are easily confused with early tuberculosis. They justify a

routine Wassermann test when tuberculosis is suspected, especially in early adult and middle life.

22. Myalgia, arthralgia, and bone pain are

easily confused with "rheumatism." The traditional nocturnal character is not a safe guide to syphilis and is often absent. (John H. Stokes and Albert R. McFarland, *American Journal of Syphilis*, July, 1922.)

A CASE OF BRAIN ABSCESS OF UNUSUAL ETIOLOGY

Samuel Silbert, New York (*Journal A. M. A.*, Oct. 21, 1922), cites a case of brain abscess resulting from direct introduction into the brain of an infected foreign body. A boy, aged 6 years, who had always been in good health, had stumbled and fallen on a stick which he was carrying, causing a small wound on the left side of the face which bled profusely. This wound became infected and discharged considerable pus, but healed firmly in about eight days. The boy then seemed perfectly well and was taken to the country. Two weeks later, the child began to complain of headache and seemed a little feverish from time to time. The child did not complain of feeling ill and played with the other children. After about four weeks, the headache became so severe and the fever so high that the boy was put to bed. He did not vomit and had no convulsions. His condition became rapidly worse; he became delirious, and was brought into the hospital in a moribund state. The admission diagnosis was pneumonia, with pneumococcus meningitis. A lumbar puncture was made; 25 c.c. of purulent fluid under moderately increased pressure was removed, and 20 c.c. of antimeningococcus serum given. A gram-positive diplococcus was reported in the fluid. The condition of the child became rapidly worse, and he died about half an hour after admission to the hospital. On removal of the skull cap and reflection of the dura, the surface of the brain was found to be covered with thick purulent exudate. The left temporal lobe showed marked flattening of the gyri, and, on palpation, fluctuation was obtained. Section through this area revealed a large abscess cavity filled with thick purulent material. The dura overlying the abscess had a perforation less than 1 cm. in diameter, and a probe introduced into this opening led directly through a similar perforation in the squamous portion of the temporal bone to an abscess under the temporal muscle. The perforation, through the bone was the site of a localized osteomyelitis, and from the tract two wooden splinters were recovered. The subtemporal abscess lay directly beneath the healed wound on the left side of the face. Microscopic examination revealed a dense purulent infiltration of the meninges. The organism was a staphylococcus.

THE USE OF VEGETABLES IN THE DIABETIC DIET

Two dietaries for severe diabetics are given by Hilda M. Croll, New York (*Journal A. M. A.*, Oct. 21, 1922), to illustrate the variety the addition of thrice boiled vegetables gives to the diet, and to show the practical value of knowing the carbohydrate content of vegetables used. Since large amounts of water soluble constituents are removed by thrice boiling, small amounts of fresh fruits and vegetables containing mineral salts and accessory substances should be included in a diet depending largely on thrice boiled vegetables for bulk and variety. The flavor of these vegetables may be improved by the use of suitable seasonings, and by the combination of several vegetables into salads or other dishes. From the purely medical standpoint, this factor of palatability and variety in the diet should not be overlooked, since the success of the dietetic treatment of diabetes depends largely on the willingness and ability of the patient to keep within the food limits set by the physician.

THERE IS SUCH A THING AS AN ARISTOCRACY OF BRAINS

The president of Dartmouth College has asserted that too many men go to college; he deems it necessary to define the individuals to whom, in justice to the public good, the privilege shall be extended, and to specify those from whom the privilege should be withheld. He believes there is such a thing as an aristocracy of brains, made of men intellectually alert and intellectually eager, to whom increasingly the opportunities of higher education ought to be restricted.

WHY THEY MISSED FAME

Lots of men would leave their footprints

Time's eternal sands to grace

Had they gotten mother's slipper

At the proper time and place.

—Atlanta Constitution.

This is the story of Johnny McGuire,
Who ran through the town with his trousers on
fire.

He went to the doctor's and fainted with fright
When the doctor told him that his end was in
sight.

—Jack-o-Lantern.

**THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION**

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

Office of Publication, 406 W. Berry St., Ft. Wayne, Ind

MARCH 15, 1923

EDITORIALS

**STANDARDIZING THE WASSERMANN
TEST.**

ROBERT A. KILDUFFE, laboratories of the Pittsburgh Hospital, discusses, in the February number of the *Journal of Laboratory and Clinical Medicine*, the question of standardizing the Wassermann test. It is well known that different results are at times obtained by different workers using methods which possess a wide potential range of delicacy and specificity, and that in the borderline cases, where the reaction often has a vital significance, the clinician is sometimes puzzled by the reports made to him. This fact has led to the recognition for the necessity of a standard method for performing the test which when generally adopted may be expected to produce a uniformity of results.

Concerning the attempt to establish uniformity in some of the phases of serological diagnosis, Kilduffe says that the Wassermann test should not be made, as it is in a large proportion of cases, the sole and main avenue of investigation as to presence or absence of syphilis. The diagnosis of syphilis should not be looked upon as the sole prerogative of either serologist or clinician but rather as a problem requiring the joint efforts of both, working not separately but together. The clinician should know that the one from whom he receives a Wassermann report is a competent, well-trained worker and able to interpret as well as to make the test. A Wassermann report should consist of something more than a mere statement of the result arrived at, and might rightly include the serum dose because this factor has been shown to influence the character of the results obtained; the antigens used, because various antigens are very decidedly variant in delicacy; the results obtained with each antigen separately; the character of the incubation, heat, ice box or ice water bath; and finally the serologist's interpretation in full of the reaction as a whole. When reports from two laboratories disagree the answer, at times, may be found in a variation of technic, and Kilduffe suggests that in cases where clinical and laboratory findings disagree, one leave an element of doubt, the furnishing of

clinical data for the serologist will not infrequently be of assistance in the final interpretation of the reaction, or help to indicate methods through which a diagnosis can be made.

MEDICAL CHARITY

THE Cleveland Academy of Medicine has published a report concerning the abuses of clinic service and has offered the very commendable recommendation that all patients be divided into three classes—First, those amply able to pay; second, those able to pay; third, those unable to pay.

This classification may seem applicable to clinics but we believe that patients of all kinds may be divided into more classes than mentioned, and we are under the impression that the number of people who are *unable* to pay anything is very limited in numbers except in the very squalid sections of our large cities.

We who are living in the smaller cities and towns are imposed upon greatly by benevolent and charitable organizations that attempt to place in the "unable to pay" class a large number of people who can and should pay *something* for professional services rendered. Charity is all right in its place, but there is such a thing as pauperizing the community and causing people to lose their self-respect unnecessarily by bestowing charity upon them when it is not indicated or due. The poor person who receives professional services ordinarily worth one hundred dollars and for which but one dollar is paid, and that one dollar is entirely in keeping with the ability of the patient to pay, is a far better citizen and less inclined to be a burden upon the community than he would be if the services rendered him are donated.

The truth of the matter is that our social workers and officers of benevolent and charitable organizations should begin to discriminate more in the bestowal of charity and pay more attention to the question of helping impoverished people to be self-sustaining at least in part, and upholders of self-respect. There is room for the public clinic, and it has an important function to perform, but there have been many and grave abuses of it and these abuses are growing at a rapid rate. The whole system needs reorganizing to the end that better service can be rendered the deserving poor while at the same time the community is not pauperized by misplaced charity.

THE THAIN CASE

THE *Fort Wayne News* editorially condemns the medical profession in Fort Wayne for not preventing George W. Thain from practicing medicine after serving a prison term a few years ago for performing a criminal abortion which

resulted in the death of a woman and now again indicted for performing a criminal abortion that has resulted in the death of a young girl. Concerning this we desire to record the following facts:

When Thain was convicted a few years ago the Fort Wayne Medical Society, through its Secretary, immediately notified the State Board of Medical Registration and Examination of the facts in the case and of his conviction in order that the Board might proceed to revoke his license under the powers invested in them by the Medical Practice Act. The Board as it existed at that time, never a credit to the Medical Profession or any one else and appointed through political influence only, replied through Secretary Dr. W. T. Gott, that it was powerless to act unless the proper affidavits were filed by the Fort Wayne Medical Society or others and these affidavits accompanied by a full transcript of the evidence. On at least two occasions, subsequent to Thain's prison record, the attention of Secretary Gott, was called to the fact that Thain was still practicing medicine, and upon one occasion Dr. Gott replied that he would look into it. The Medical Practice Act not only gives the power to the State Board of Medical Registration and Examination to revoke licenses under such circumstances, but explicitly states that it is the Board's duty to enforce this law and to prosecute all violators. The Board, as then constituted, did prosecute other violators and did revoke other licenses under similar circumstances, showing that they understood perfectly of what their duties consisted. Their refusal to act in the Thain case constituted a failure to do their simple duty as explicitly outlined in the statutes.

At the time of the Thain episode the Board had a member residing in Fort Wayne (Dr. James M. Dinnen) who was acquainted with all of the facts and who, had he exercised the slightest evidence of right thinking and acting, should have refused to have been a party to what ever since has been a disgrace heaped upon many other disgraces that may be charged to the Board of Medical Registration and Examination. The Fort Wayne member and all the other members of the Board of Medical Registration and Examination as it existed at that time ought to hang their heads in shame and suffer many pangs of regret if they realize that through their failure to act it has been possible for the life of a young girl to be ruthlessly and criminally destroyed.

There is another side to this question, and it is that which pertains to the attitude of the politicians and the public. The medical profession constantly is making efforts to purify its ranks and to raise the standard of efficiency of

those who hold themselves out to treat the sick, but nearly every time that a doctor is thrown out of a reputable medical society for incompetency, quackery or criminal practices a sympathetic public comes forward and upholds the offender in his contention that he is being persecuted. If perchance his troubles land him in court a sympathetic jury decides in his favor. If the reputable medical men attempt to obtain laws to prevent men of the Thain stripe, ignorant, untrained and with criminal tendencies, from practicing medicine, the cry goes up that we are trying to establish "a medical trust," and if reputable medical men ask that the official boards that pass upon the qualifications of candidates for medical licensure shall be composed of men of principle and character who will act consistently and intelligently, we are met by the exigencies of politics which results in the appointment of men on those boards who are not representative of the highest ideals of the medical profession, and who do not and could not secure the endorsement of the medical profession. Thus at the time that Thain returned to practice, after having served a term in prison for criminal abortion, the Board of Medical Registration and Examination was composed of members supposedly representing the medical profession but who had little other than political "pull" to influence the governor in their appointment. In fact, Governor Marshall frankly informed the writer of this editorial that while he was anxious and willing to appoint men on the Board of Medical Registration and Examination who would uphold the educational, ethical and moral principles involved in the performance of duty, and that while he would like to change the personnel of the Board as it existed at that time because he felt that right principles were not being upheld, he realized that he had to defer to political expediency. It was this same Board, tolerated as a result of political expediency, that permitted Thain to continue in practice after serving a prison term for criminal abortion, in spite of protests from reputable medical men.

If the lay press and the public will help the medical profession to purge its ranks of incompetents and knaves, there will be fewer criminal abortions, fewer cases of malpractice, and fewer deplorable cases of maltreatment due to the ministrations and attention given by members of the ignorant and untrained pseudo-medical cults. Perhaps when we have a few more tragedies like the one under consideration the public will begin to realize that reputable medical men have something more than selfish ends in view when they ask that a high standard of education, training and morality shall be required of everyone before he attempts to treat the sick and suffering.

DR. GOTT'S VERSION OF THE THAIN CASE

Dr. George Thain, of Fort Wayne, a few years ago was convicted and served a prison term for criminal abortion that resulted in the death of a woman. After returning from prison he resumed the practice of medicine, his license not being revoked even though the Board of Medical Registration and Examination was asked to give the matter attention. Quite recently he has been indicted again for criminal abortion that resulted in the death of a young girl. The *Fort Wayne News*, desiring to place the responsibility for Thain's continuance in medical practice after having served a prison term for criminal abortion, evidently has interviewed Dr. W. T. Gott, who for many years was secretary of the Board of Medical Registration and Examination, concerning the matter, and, in its issue of March 7 the *News* publishes the following from Dr. Gott:

"When I heard of Thain's recent indictment I was under the impression that his license had been revoked at the time of his previous trouble, and so I looked the case up in our records to make sure. I found, however, that the case against him had failed for a lack of prosecution. The Allen County Medical society had refused to take action and, of course, no one else had.

"Our Board acts in all such cases, you understand, as a court. It is not a prosecutor and it is not a jury. It is a court. It hears evidence submitted by outside parties and on this evidence it renders its decisions. When Thain was indicted and convicted several years ago, the Board had charges preferred. We wrote several letters to the medical society of Allen county, calling its attention to the importance of revoking this license, and asking its co-operation, but we never received a reply.

"I remember quite well the distinguished appearance of Thain in Crawfordsville, he coming here to secure from me a copy of the charges. His ice cream pants, his long frock coat dangling to his heels, his shiny plug hat, and his vacuous countenance made an impression on me that will never be effaced. I realized then as only a visual demonstration could make me realize, that the fellow was not only a quack, but a mentally unequipped one, and I was earnestly impressed with the desirability of getting rid of him. But we could get no response from the Allen County Medical society. It was strangely complacent to this man's continuance as a doctor, so as a doctor he was finally continued. A convicted criminal, his name was never erased from the rolls of practicing physicians.

"I am now fondly hoping that this new charge will stir the reputable doctors of Fort Wayne into some determined action. The Board is more than ready to do its part and has been ready at

all times. Indeed, all that would be necessary would be for the Allen County Medical society or some member of it, to secure a record of Thain's conviction and present it as evidence of his unfitness to practice medicine."

Dr. Gott can not cover up his own incompetency and failure to perform his manifest duty by an attempt to shift responsibility in the Thain case to the Fort Wayne Medical profession. In the first place, the medical law distinctly states that the State Board of Medical Registration and Examination is charged with the duty of enforcing the act, and it distinctly states that prosecuting attorneys shall, *upon the complaint of the Board*, prosecute any violation of the act. In fact, even at this late date, and following Thain's second indictment for criminal abortion, the prosecuting attorney at Fort Wayne says that he feels that it is the duty of the Board, in accordance with the provisions of the law, to make the complaint and then the prosecution will be based on the Board's complaint. In many other instances the Board, uninfluenced by members of the medical profession, has made complaints to prosecuting attorneys that resulted in prosecution of offenders guilty of crimes less heinous than that of Thain. Why didn't they enter complaint following Thain's indictment a few years ago?

Dr. Gott makes an absolutely false statement when he says that he wrote several letters to the medical society of Allen county concerning the desirability of revoking Thain's license and never received a reply. As a matter of fact the Secretary of the Fort Wayne Medical Society wrote to Dr. Gott suggesting that inasmuch as Thain was in state's prison it was the proper thing for the Board to revoke the license, and Dr. Gott, had he possessed the slightest conception of duty, would have taken the necessary steps to revoke Thain's license. Furthermore, when he states that the Board has been ready at all times to assist in prosecuting offenders against the medical practice act, he knows that he is guilty of a misstatement and, if necessary, we can produce a number of instances to substantiate our contention. We also will produce instances to show that Dr. Gott has gone out of his way to both persecute and prosecute medical men when no formal complaint was placed before the Board.

The truth of the matter is that there are many things connected with the operation of the Board as constituted at the time of the Thain episode which require explanation, and if Dr. Gott had been shrewd he would have kept still about the Thain case.

The prosecutor in Fort Wayne and the members of the Fort Wayne medical profession are not going to permit Dr. Gott to shift his responsibility to them, and they are not going to

take initiatory action in the Thain case at this late date. We shall be interested in knowing whether Dr. Gott and the other members of the Board of Medical Registration and Examination ever bring about belated action. If Thain's license is not revoked the fault will lie entirely with the Board. While we think that Dr. Gott should have been removed from the Board long ago, we are quite certain he should not be permitted to remain a member of the Board for another minute unless he takes action that will result in the revocation of the Thain license.

MEDICAL KNAVERY AND INCOMPETENCY

THE *Christian Science Monitor* gives a garbled quotation from one of our editorial notes in which we commented upon the tendency on the part of some incompetent or dishonest doctors to perform unnecessary operations, and the inference is drawn that *all* medical and surgical work may be unnecessary and that, therefore, we are not to be trusted.

To our notion we ought to be commended for recognizing our own shortcomings, for that is something more than the Christian Scientists will acknowledge concerning their irrational and inconsistent delusions. The fact that one doctor makes a mistake or is dishonest should not apply to doctors in general. We admit that there are incompetents in the medical profession, but the very reason we have incompetents is largely due to laws, created and sustained by public opinion, which do not provide for proficiency. That there are crooks and rascals in the medical profession we also admit, with considerable regret, but there also are crooks and rascals belonging to every profession or trade, but that doesn't prove that either the medical profession or any other profession is deserving of general condemnation for unprincipled morals. However, we do think that the growth of Christian Science and the many phases of drugless healing is in a measure due to the tendency on the part of some physicians in every community to subject patients unnecessarily to operative attention. True it is that patients want something done, and oftentimes they are too willing to submit to operations that are ill advised and oftentimes are based upon mercenary motives rather than on real pathology requiring operative attention. Incidentally it may be argued, and with just cause, that the pernicious practice of fee dividing has been a wonderful inducement for the recommendation and the performance of needless surgical operations. Undoubtedly, as a well known fee divider has said, the public does not interest itself nor care about the fee dividing controversy in the medical profession, but that is because the public has

never been made acquainted with the pernicious features pertaining to the practice of fee dividing. Nevertheless the public is suffering from it, and without fully recognizing the reasons therefor is trying to escape from it by adopting forms of treatment that offer little or no benefit in the more serious pathological conditions but which do free them from needless operations and the mercenary tendencies of so many general physicians and surgeons.

What we must do is to clean up our own profession and get rid of some of the detrimental practices that prevail before we can expect the public to enter whole-heartedly into a plan for improving conditions for the benefit of the public as well as the medical profession. We can not expect to get support from the public for our plans to raise educational standards when we permit, without opposition, any of the members of our profession to prostitute their high educational qualifications on the altar of financial greed. On the other hand, it will be a difficult thing for us to correct these objectionable features within our profession unless we have the support of the public in our efforts to create a better medical profession. In other words, what we need is the support of the people in creating and maintaining not only a higher intellectual standard for our medical men, but a higher standard of morality. Just as long as we tolerate within our ranks men that we know to be knaves as well as incompetents, and just as long as the public will patronize those knaves and incompetents, just as long will we continue to have the unsettled condition of affairs that exists today and a general tendency on the part of the public to look with suspicion upon all of the endeavors of the medical profession.

BUREAUCRATIC GOVERNMENT

THE number of people who are fattening at the public crib is increasing constantly. Congress and our state legislatures are providing more bureaus and commissions to take care of the demands of various uplifters, and this means the addition of employees who must be paid salaries wrung from the people who already are over-burdened with taxes to pay criminally extravagant war expenses and the ever-increasing salary list for the services of a horde of more or less indolent public officials. It is a well-known fact that there are thousands of useless employees in Washington. Many of those that are needed have never been required to put in an honest day's work, and they give even less than is required of them. Inefficiency is the rule rather than the exception, and we have built up such a powerful organization of public officials who have bureaucratic control of our

governmental agencies that our law makers are actually afraid to oppose them. In fact those on the public pay rolls form a political machine that, as a direct result of its various ramifications and influence, is able to control legislation that affects its own welfare. Federal and state aid for anything that will increase the number of employees, or the salaries of existing employees, brings forth an influence that is difficult if not impossible to overcome, and as a direct result of this increased cost of government we find an increased burden of taxation upon the people.

And while we are on this subject we might mention the rapid increase in the number of employees in the public health service. Here again we have a political organization which puts forth every activity toward an increase in its functions and an increase in its pay. One of the most potent influences tending toward the socializing of medicine is the public health service, and unless something is done to stem the tide, the medical profession as a profession will be subservient to public health officials, and every aspect of the practice of medicine will be under bureaucratic control. Concerning this matter one ex-congressman has said, "Let the proportion of public employees continue to increase as rapidly as they have in late years and we will within a reasonable time witness this phenomenon: Our population divided into two classes, those holding public office, still a minority, it is true, and all others working to support the minority in office. From that condition to the soviet form of government is but a single step."

OUR COMMITTEE ON CIVIC AND INDUSTRIAL RELATIONS

A FEW years ago the Indiana State Medical Association made provision for the appointment of a Committee on Civic and Industrial Relations. In doing so the Association took into consideration the need for investigation and recommendations covering many enterprises directly or indirectly connected with the practice of medicine which have to do with the social or economic welfare of not only medical men but the public as well. Other state medical associations have committees of like character which really functionate and accomplish much good. What has been done in Indiana? Not one single thing, and last year even the president of the Association took so little interest in the matter that he did not appoint the committee.

For several years we have been contending that all of the vicious phases of medical practice as imposed upon us by welfare workers, industrial concerns, insurance companies, lodges, compensation boards, charitable organizations,

etc., have been carried on as a result of the spineless attitude of the individual physicians. As individuals, physicians have been unable to correct some of the injustices and impositions forced upon us, but as a class we could accomplish something for the betterment of the profession and the betterment of service rendered the public when dealing with these various enterprises. One of the ways by which we could accomplish something is through a Committee on Civic and Industrial relations which could investigate many economic questions and report conclusions and recommendations which might lead to action of the profession as a whole. A means of accomplishing something has been afforded by a provision for the appointment of such a committee as mentioned, but though such a committee is supposed to be a standing committee of our State Medical Association, not a thing has been done to accomplish anything. Doctors continually are crying out about abuses that should be corrected, and yet they put forth no constructive effort to put a stop to the abuses of which they complain. Really, we sometimes think that doctors need a good "trimming," and the Lord knows that they are getting it as a direct result of their apathy in efforts to improve their own status.

MEDICAL FEES

QUITE recently we have noted in the daily press a judgment of the courts concerning the amount of a lawyer's fee for advising a client—and not very wisely at that, either—as to how to protect himself in the matter of the sale of some eight thousand dollars' worth of stock, which finally was sold for about six thousand dollars. In all probability the advice required about five minutes' of time, and yet the lawyer expected a fee of about 25% of the amount of money involved, and the courts practically sustained him in his contention. Had it been a doctor who was giving a little advice that would save a human life, the courts would have felt that robbery was contemplated if one hundred dollars was asked for the service. In fact, considering the nature of the service rendered, their technical character and the fact that health or life is affected, there is no question but that medical fees on the whole are niggardly. Aside from the fact that the doctors' charges usually are moderate, all things considered, he gives away his services—which are his stock in trade—to charitable organizations and various public health enterprises, to say nothing of reducing his fees to industrial concerns, life insurance companies, and benevolent societies. Who ever heard of a lawyer donating his services to anybody or anything? Even the worthy poor invariably are charged a fee for the services of a

lawyer, and when it comes to actual "hold ups" in the matter of fees for services rendered, the lawyer takes the prize, and everyone sits back and applauds him for his business acumen.

While we are on the subject of fees, permit us to remind the doctors that it pays far better to attend pigs in their sickness than to attend human beings. A pig really is rated as worth something in dollars and cents, but the average farmer puts no monetary value on his child, and refuses to pay even the smallest fees to save his child, though he will pay almost any price to save a pig. A veterinary surgeon has told us quite recently that he never makes an examination of any animal for less than five dollars, and in case he examines several animals at one visit he charges no less than twenty-five dollars, oftentimes one hundred dollars, and that added to this he charges one dollar per mile for every mile that is traveled. He volunteered the information that he never has any complaint from farmers concerning these charges, and that he invariably collects his bills promptly and without trouble. We venture to say that the same farmers who pay this veterinary surgeon so well will howl like stuck pigs if a physician charges half of the veterinarian's fee for taking care of a sick child, and he not only kicks about the bill, but he does not pay for months or years afterward, and perhaps never pays it at all.

Who is responsible for this condition of affairs? The medical man, and the medical man only! Not only does he fail to charge and collect reasonable compensation for the services he renders, but he puts obstacles in the way of other physicians who would collect appropriate fees. Back of all is lack of organization and unity of purpose. We look to the scientific and educational side of the practice of medicine, but we overlook the economic phases of our work. The practice of medicine is a profession, it is true, but likewise it is a vocation, and as a vocation it should afford us the food for our empty stomachs and roofs to cover our defenceless heads. Therefore, we are justified in looking to the economic features connected with our work, and it is the failure to do so which today is putting the medical man lower and lower in the scale of workmen when it comes to estimating the value of his services by the standard of dollars and cents.

THE SHEPPARD-TOWNER BILL

As an evidence of what a lot of ill advised uplifters may accomplish in the way of bad legislation we point to the Sheppard-Towner bill which, under the guise of promoting general welfare and the hygiene of maternity and infancy, was favorably considered by Congress and enacted into a law. Like many other laws,

it slipped through without receiving the careful and analytical consideration that it deserved. Its power is vested in a Board of Maternity and Infant Hygiene under the control of the Department of Labor, and the members of which for the most part are laymen. The bill appropriates nearly one and one-half millions of dollars for every year for a period of five years. Fifty thousand dollars of the amount is allowed the Bureau for expenses, and the balance goes to the several states, providing they elect to comply with the regulations of the Bureau and meet the federal appropriation by a like amount as a state appropriation. Massachusetts has refused to accept the appropriation and has asked that the Supreme Court pass upon the constitutionality of the Bill.

Concerning this matter, the Massachusetts Civic Alliance says: "It is an anomalous bill which requires the states to establish extension courses of lectures and consultation centers, but forbids the renting or purchase of any building in which to hold them. It employs nurses, but not for nursing. Its title pretends that it is for the public protection of infants, but the bill naively provides a method of protecting infants from its ministrations. It is for mothers, but it overlooks pregnant women and expectant mothers. It is for child bearing, but provides neither doctor, nurse nor midwife for obstetrics. It is advanced on the claim that it will reduce deaths of mothers and infants, but it makes no medical provision and employs no physician. What then is its object?"

In answering this question the chairman of the Committee on Civic and Industrial Relations of the Michigan State Medical Society, says: "It is a bill which claims to have the support of a majority of the Women's Clubs, and yet it is safe to wager that not one woman in five hundred of the club members whose endorsement is claimed knows more of the bill than its title—headlines, if you please. We will go further and say that it is safe to wager that not one in ten of the officers of the clubs can state clearly the provisions of the bill. The headlines are working with telling effect—Welfare—Getting something for nothing. We can go still further and say in all truth that it is simply another raid on the supposedly weak part of the body politic, the medical profession, and by making a break in the dam at this point, in the name of alleged suffering humanity, the whole dam will go out and the country can be socialized and sovietized to the very limit. * * * It is time the issue was squarely drawn. For years the physicians have been the butt of every uplifter and welfarer. It is time to give the lie to the cry that we fight only in behalf of our purse. For every fraction of a welfarer who works without money and without price, saving

as notoriety is a price—you will find ten thousands of working physicians who give their time—give their money, and give of themselves to the work of helping suffering humanity. They give without money and without price, without even the praise of the public, for the publicity which is life to the uplifter is professional death to the ethical physician. As a measure, the Sheppard-Towner bill, with its empty promises is to make one smile. But to the citizen, the Sheppard-Towner bill with its untold possibilities for centralized power for bureaucratic control—for taxes piled on taxes for the benefit of the office holder at the expense of the worker—is a menace which should be met and wiped out."

REVOCATION OF MEDICAL LICENSURE

Most anyone can practice medicine in Indiana without let or hindrance. Our medical law is a dead letter because it has not been enforced and can not be enforced. This condition of affairs is in a very large measure, if not wholly, due to the incompetency and the inactivity of the Board of Medical Registration and Examination as it has existed and been operated for fifteen years immediately following the enactment of the present medical law. At the present time we fail to understand why we maintain a Board of Medical Registration and Examination that does not functionate except in a very perfunctory way. If anyone doubts what has occurred in the past by way of inefficiency and questionable practices as pertains to the operation of the Board of Medical Registration and Examination, let him read in this number of *THE JOURNAL* the history of the Thain case. Of all of the inconsistent and asinine defenses put up for dereliction of duty, the one offered by Dr. Gott concerning the reasons why Thain was permitted to practice medicine after serving a term in State's prison for criminal abortion "takes the cake." Dr. Gott has gone out of his way more than once to persecute reputable members of the medical profession, by compelling them to comply with some technical requirements of the law, as he also has gone out of his way more than once to obtain evidence against medical men with a view to revoking their licenses. He also has been partly responsible for the revocation of licenses when not a single member of the medical profession offered complaint or was asked to furnish evidence. Why did he fail to take measures to revoke the Thain license when he personally knew that Thain was in State's prison serving a term for criminal abortion, and the law distinctly states that anyone convicted of such a crime shall have his license revoked? Dr. Gott knows that the law distinctly states

that the Board is charged with the enforcement of the medical practice act, and there is nothing in the law that even intimates that members of the medical profession, either individually or collectively, shall furnish evidence or assist in the prosecution of offenders. The fact of the matter is that up until the time that Drs. Davidson and Shanklin were appointed as members of the Board, the Board has not been a representative one and has been guilty of very questionable practices, of which the Thain episode is but one of many. We think that it is high time that men of the Gott stripe be removed from the Board, and we commend this suggestion to Governor McCray.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in *THE JOURNAL*, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask *THE JOURNAL* about them, or write direct to the Cooperative Medical Advertising Bureau, 536 N. Dearborn St., Chicago, Illinois.

We want *THE JOURNAL* to serve YOU.

AGAIN permit us to suggest that you pay your dues if you have not done so already. It is only through organization maintained by your cooperation and your influence that the interests of the physicians individually and collectively can be protected.

In the *News Notes* in this number of *THE JOURNAL* will be found an announcement concerning the special train de luxe to be run in the interest of Indiana doctors, their families and friends, to the American Medical Association convention at San Francisco. A wonderful tour has been planned. For further information write Dr. Ralph S. Chappel, 305 Terminal Building, Indianapolis.

It is only the doctor who has been defended successfully by the Association in a malpractice suit who appreciates what the medical defense feature of the Association means to him. Not only is this defense furnished without cost to the one defended, but the character of the defense, supervised as it is by those familiar with that form of legal action, is more valuable than that which could be obtained by ordinary means.

Therefore, membership in the State Association is worth all that it costs if it furnishes nothing more than defense in malpractice suits.

WE still hear about the Abrams methods of diagnosing and treating diseases, and here in Indiana there are a few physicians who claim to be disciples of Abrams. Perhaps they are reaping a harvest, for it is reported that a great number of physicians who are using Abrams' oscilloclast are enjoying incomes of from one to two thousand dollars per week. It doesn't seem to make any impression upon these doctors that Abrams has been proven a species of fakir and his theories and contraptions without merit. As the *Boston Medical and Surgical Journal* well says, "It would be well to investigate thoroughly before adopting some new contraption guaranteed to cure over night."

IN the closing days of the Indiana legislature a bill was passed which carries with it the acceptance of the provisions of the federal Shepard-Towner Act which presumably is an aid to maternity but which, in reality, will be of little or no assistance to the expectant mother, though it will furnish jobs for a lot of officious meddlers. Thus do we "every day and in every way" add to the bureaucratic control of our destinies. Some day there will be an awakening, but, with the powerful political machine that is being built up by bureaucratic government it will be a very difficult thing to get back to that independence of thought and freedom of action that a few years ago was the boast of the American people.

IN his presidential address before the last meeting of the Mississippi Valley Medical Association Dr. Charles E. Barnett, of Fort Wayne, advocates the creation of a Better Business Bureau for the medical profession in every populous community. His idea is that there should be some method of stimulating a square deal for medical men in their dealings with each other as well as in their dealings with the public, and he suggests that the Bureau should have a paid secretary who would assist the state and national bureaus of the American Medical Association. He calls attention to the fact that our hospitals and medical colleges are exercising better business principles, so why not such a policy among men themselves?

IF the medical men are ever going to get anywhere in the estimation of the public it will be necessary to get away from petty antagonisms and jealousies so common among medical men and unite in an effort to sustain and perpetuate the best traditions and ideals of the profession.

Why wrangle among ourselves over insignificant differences of opinion, with the public an interested spectator and magnifying the significance of it? A principle is worth fighting for, but differences of opinion concerning trivial matters is unworthy of the importance sometimes given such things. We should strive for harmony through the amicable settlement of all disputes, remembering that it is only through a united and harmonious medical profession, working toward a common end, that results are secured.

A NEW YORK firm, dealer in coats, gowns and aprons for doctors and dentists, has canvassed Indiana for orders. The salesman tries to please the customer by offering to comply with almost any kind of specifications as to style of coat or gown, quality of material, and manner of making, but he demands a substantial deposit upon the order. This does not insure the filling of the order according to specifications or the desires of the customer, and to top the thing off the goods are sent C. O. D. The firm thus demands confidence for themselves but refuses to grant any confidence in the customer, and experience shows that aside from the fact that a square deal is due both parties to a transaction, in this particular instance confidence may be misplaced. At all events, doctors, who generally are "easy marks," ought to be on their guard against the sharp practices resorted to by firms that are not willing to extend credit where credit is due, and are unwilling to place confidence in the intention of a customer to do as he would be done by.

WE wonder if the manufacturers of pharmaceuticals and other products sold to physicians are aware of the fact that they waste an enormous amount of money in circulars which are promptly consigned to the wastebasket without reading. Some firms even go to the expense of sending their advertising trash by first class mail in the hope that it will receive the attention of the recipient because of the disguise, never stopping to think that one glance at it is quite sufficient to stamp it as advertising matter and lead to its prompt consignment to the wastebasket. It is strange that these firms who waste money circularizing the medical profession do not realize that for ten dollars spent in that way the benefit derived could have been duplicated by one dollar spent in advertising in the medical journals that doctors read. Furthermore, advertising in medical journals has some permanency and lasting qualities which may bring results long after the medical journal in which the advertising appears has been issued, whereas the circular letter at once consigned to the wastebasket is lost forever.

THOSE doctors who are having their troubles with insurance or indemnity companies in the settlement of claims for professional services rendered should remember that their troubles are largely brought about through the action of some member of the medical profession who is acting in an advisory capacity or perhaps is entirely responsible for the fixing of compensation for the services rendered. These so-called medical advisors or medical directors, with an eye single to their own advancement and profit, are quite willing to sacrifice their professional brethren on the altar of commercialism. They believe in tarring everybody with the same stick, and no matter who renders the services, a rather hard and fast rule is adopted with the view of paying for the services at a low rate. They are even frank enough to say to their superiors that doctors are not organized enough to fight and that individual doctors are willing to compromise rather than go to the trouble and expense of contesting. Isn't it about time for the medical profession to take some means of censuring its members for conduct that is directly opposed to the best interests of the medical profession, both from an ethical as well as an economical standpoint?

WHILE every doctor in Indiana was interested in the bills before the last legislature which carried with them an increase in the cost of operating an automobile, yet we know that very few of them took occasion to voice their sentiments to the members of the legislature. In all probability no doctor had any objection to offer to a doubling of the automobile license fees and an imposition of a gasoline tax of two cents per gallon, providing the revenue raised from such sources went toward building better roads in Indiana, but, as a matter of fact, to raise revenue in this manner and turn it in to the general fund and give only a small portion to the public Highway Commission stamps the whole thing as unfair discrimination in that it makes automobilists bear too much of the burden of general taxation, while at the same time crippling an enterprise that is of direct value to all the people as well as the automobilists themselves. Fortunately, an eleventh hour change of the bill insures an increase in the sums to be given for road making, with the possibility of obtaining the federal appropriation for that purpose, and with that result accomplished no automobilist will complain about the increased taxation that is charged against automobile operation specifically.

WISCONSIN is going over to socialism "bag and baggage." Its legislature has done away with the state troops, and a number of other measures having socialistic tendencies have

been adopted. There can be no secret in business, and every individual and concern must bare to the world their financial affairs. A radical socialist is being re-elected for Congress, and Senator Lafollette, a socialist at heart, during the war had his loyalty to his country questioned. The faculty of the Wisconsin University has been censured by the Wisconsin legislature for daring to announce that they considered Senator Lafollette's actions during the war as disloyal. Probably the next thing will be the abrogation of property rights.

We hope that Wisconsin gets its fill of these acts on the part of radicals, and if reports are true there is evidence that they are beginning to pay the penalty, for some of the prominent business men and manufacturers are contemplating moving from the state. We really hope that Wisconsin actually will adopt the entire socialistic program, for perhaps the lesson will not be without profit if it points out to the rest of the States of the Union the fallacies and dangers of such a program.

AT the present time there is considerable discussion in this state concerning full time instructors in the medical department of our State University. Insofar as the discussion pertains to the teaching of clinical medicine we are inclined to oppose the plan of establishing full-time teachers. Concerning this subject we quote from an address by Dr. John B. Deaver before the last session of the American College of Surgeons:

"During the last five years, as you know, the tendency has been toward the full-time clinical teacher. Its central idea was good, but its application, begun before the war, if I mistake not, was influenced by the German idea of efficiency, which, as you all know, failed utterly to include the human element in its equation. Without wishing to appear reactionary, but with the interest of the profession in mind, I do not hesitate to say that I doubt the wisdom of the present course. It is an extreme, and the pendulum must soon swing in the opposite direction. The professor of clinical branches should not only be allowed, he should be obliged, to be in direct professional contact with the public. The science and art of surgery are one and inseparable. There can be no art that is not based on science, and there is no science without its practical application."

WE notice that in some states the public health authorities are being asked to endorse the principles enunciated by the American Medical Association concerning the question of state medicine. We suggest that it would clarify the atmosphere in Indiana a little if our public

health officers gave us such endorsement. For their benefit we reproduce the resolution that was passed at the last session of the A. M. A. It is as follows:

"The American Medical Association hereby declares its opposition to all forms of 'state medicine' because of the ultimate harm that would come thereby to the public weal through such form of medical practice.

"'State Medicine' is hereby defined for the purpose of the resolution to be any form of medical treatment provided, conducted, controlled or subsidized by the federal or any state government or municipality, excepting such service as provided by the army, navy or public health service and that which is necessary for the control of communicable disease, the treatment of mental disease, the treatment of indigent sick, and such other service as may be approved by and administered under the direction of or by a local county medical society and are not disapproved by the state medical society of which it is a component part."

NEVER before have arrangements for an annual session of the American Medical Association been so inviting as are the arrangements for this year's session. Starting out with a number of special trains, that really will be sight-seeing trains, stopping en route at interesting places, and ending with the session at San Francisco which promises to eclipse any Pacific Coast session that has preceded it, those contemplating the trip are promised an unusual treat. The scientific program promises to be of unusual excellence, and aside from this, arrangements are being made for clinics that will be held in the various hospitals in San Francisco, not only during the time of the convention but preceding and following it. These clinics will not be conducted by San Francisco physicians alone, but will be conducted in many instances by leading medical men from some of the best educational centers like Denver, Chicago, Philadelphia, New York, and Boston. Those who desire to participate in these clinics are asked to communicate with the headquarters of the A. M. A. in San Francisco. Then the Medical Department of Stanford University offers summer courses, which will include the specialties, for properly qualified graduates in medicine. The minimum period of attendance will be four weeks, and these summer courses may be combined with attendance at the session of the A. M. A. Finally, the arrangements for social diversion for those who will attend the San Francisco session are especially attractive, and all in all, the medical man who contemplates going to San Francisco in June is promised a profitable trip from every point of view.

It is regrettable that appointments on the Board of Medical Registration and Examination should sometimes depend upon political "pull." Up until very recently the members of the Board have been appointees that were representative of nothing but politics, and the appointments have been made despite any objections on the part of the medical schools supposed to be represented, and despite the request that men of ability and character compose the Board. In the appointment of Dr. Davidson, of Evansville, and Dr. Shanklin, of Hammond, as members of the Board, the regular medical profession, for the first time in the history of the present medical law, has been represented by men recommended and sponsored by the Indiana State Medical Association. These appointments were made only after it was pointed out to Governor Goodrich that the regular medical profession had been misrepresented on the Board long enough and it was time to listen to the Indiana State Medical Association rather than the pot-house politicians when considering an appointment to a Board that requires and should have the best obtainable ability.

What Governor Goodrich three years ago did for the regular medical profession ought to be done for some of the other sects that are represented on the Board. Governor McCray will do credit to himself if he takes this subject seriously and, in this number of *THE JOURNAL* we produce some facts and some comment pertaining thereto which indicates the need for action in getting rid of some members of the Board of Medical Registration and Examination who are not a credit to it and who actually hamper the proper enforcement of the medical practice act.

COUE has come and gone. He has received an immense amount of gratuitous advertising in the public press, and to that and that alone must be attributed much of the financial success that attended the visit. He seems to be sincere in his assumption that much of disease and suffering in the human race is psychic in origin, and there is a grain of truth in it, just as there is a grain of truth in nearly all new forms of treatment. The mistake on the part of Coue and those who are deluded by the promises of hope to the helpless and afflicted is that whatever truth there is in the theory may be made applicable to any and every kind of suffering and affliction. We might go a step further and say that a mistake has been made in not recognizing the fact that the medical profession for ages has put into practice psycho-therapeutics for the relief of conditions that are purely psychic in character. The relief of hysterical symptoms by suggestion is common in the practice of physicians, and suggestive therapeutics form a part

of the practice of every successful physician. In fact, encouragement and optimism are considered by every physician as a valuable aid in accomplishing results. It is all there is to Christian Science, but neither Christian Science nor Coueism alone can or does cure diseases caused by a demonstrable pathological lesion. However, there is room for thought on the part of the average physician if he takes into consideration the popularity of all of these drugless forms of healing, and a rational consideration of the subject indicates that the medical profession should acquaint the public with the fact that psychology does form an important factor in the treatment of human suffering, and that we employ it to the full extent of its merits.

MANY people in this world are trying to get something for nothing, and realizing this fact, book publishers and even some other concerns catering to the public, are offering complimentary books in return for a letter of endorsement, or sometimes on the promise that absolutely no remuneration or favors will be asked. One should be on guard to avoid wasting time upon these delusive offers, for there isn't a one of them that does not have some "string tied to it," which means that the one accepting the offer must give up something in return. We are led to make these remarks because right now there are some book agents working Indiana who glibly tell doctors that they actually are giving away volumes merely as an advertising proposition to introduce their wares, when as a matter of fact they are doing nothing of the kind. Incidentally, we never have understood why the average business man, reasonably shrewd in his investments, will load up his library with books, many of them expensively bound, which neither he nor any member of his family ever will open except in a casual way during the first few days of possession. The reason for this is perfectly plain—no one but students, and occasionally a member of the leisure class, needs the complete writings of any author. Why buy a full set of Dicken's merely to read "The Old Curiosity Shop" and perhaps one or two others of Dicken's best stories? What is true of Dicken's works is true of everything else produced by writers whose names have gone down in history. Unfortunately, the younger generation is not even reading the classics, but are content to read the sentimental and sensational trash that is being put out today. Anyway, there is no graft like the book agent's graft, so beware of being the "sucker," even to the extent of biting the "complimentary" hook!

THERE are many reasons why all of the various enterprises in Indiana dealing with public health, medical education and every phase of

medical practice should co-operate with each other in accomplishing better results. We do not believe that the State Board of Health should functionate entirely independent of the good will and support of the medical profession, and this likewise is true of the medical department of Indiana University, and the Board of Medical Registration and Examination. Right now, when there is a little misunderstanding concerning the policies pursued by the University in connection with medical teaching and the conduct of hospitals and clinics, the atmosphere will be cleared by a conference of representatives of the medical profession and representatives of the University. The Medical Department of Indiana University is a credit to the State and to medical education, but it will fail to accomplish all that can and should be accomplished if the authorities ignore the co-operation and good will of the Medical Profession of the State, and if they are wise the University authorities will take into their confidence and even seek the counsel and advice of the medical profession as represented by the Indiana State Medical Association in carrying out any of the policies of the institution pertain to the conduct of the medical school and the hospitals and clinics connected therewith. In this period of changing economic and social conditions there is more need than ever for co-operation and harmony in the conduct of all affairs that pertain to medicine and surgery in any of its phases, and we offer the suggestion that right now is a good time for the various agencies herein mentioned to pool their interests and pull together.

NEVER before has there been such a pressing need for cooperation on the part of every medical man in making the organized profession of service to physicians individually and collectively. It is quite true that for years we have had organizations in the form of national, state and county medical societies for scientific advancement, but with the exception of the American Medical Association these societies have done very little toward advancing the economic and social side of the practice of medicine or in educating the public as to the aims and objects of scientific medicine. In our own State Association we have had standing committees and special committees to investigate, report and offer recommendations concerning certain problems confronting us, but with few exceptions these committees have not functionated until a week or so before a report from them has been

expected, and then they have issued a perfunctory sort of report which has been accepted and as promptly consigned to the scrap heap. To-day we are virtually fighting with our backs to the wall in an effort to stem the tide of socialistic medicine in one form or another, and the general apathy of the individual physician toward the dangers that threaten him, and his failure to cooperate actively with his professional brethren in efforts to correct abuses and better his condition is responsible for the growing tendency toward the elimination of private practice and the adoption of state medicine in its stead. There is nothing within reason that can not be accomplished by an organized medical profession, but as one noted politician has aptly said, "You doctors never accomplish anything because you are never united upon the same thing, and if united you never put forth any efforts to accomplish the desired results, but expect someone else to do it for you."

We are forced to admit the truth of this saying, and we must change this condition of affairs if we are to save the individual practice of medicine from extermination. The first thing to be accomplished is the elimination of the common practice of so many doctors to adopt a plan of "every man for himself," or, to follow the scheme so aptly designated by the cartoonist, "Let George do it." What is needed more than anything else is not only a unity of purpose but some active cooperation on the part of every doctor in accomplishing results. Personal jealousies, petty quarrels and minor differences of opinion must be eliminated. The practice of rational scientific medicine is a profession that deserves and should have the highest respect and appreciation of the public. It should not be prostituted to selfish ends, nor should its good effects be limited or destroyed by lack of confidence arising as a direct result of the misapplication of the guiding principles of the profession.

THROUGH the efforts of the legislative committee of the Ohio State Medical Association, Ohio now has a medical law that affords some protection for the people of that state. The law does not favor any school of medicine but it provides that those who profess to treat the sick in any way whatsoever shall have a thorough education in all of the fundamental branches of medicine and surgery, and the extent of this education is prescribed. The law also provides penalties for infractions. Anyone who complies with the provisions of the law may practice medicine as he chooses. He can dose them, pray for them, or rub them, but he must con-

form to the educational requirements before he is permitted to do anything for the sick. Under the provisions of the law the chiropractors are paying the penalty, and we learn that many of them throughout the State of Ohio have been prosecuted for practicing medicine without a license and thrown into jail.

How different it is in Indiana! Here the chiropractors not only practice their peculiar beliefs but they even adopt some forms of practice that have no connection with the chiropractic teaching. We are under the impression that the Ohio chiropractors will come to Indiana where they will find a haven of refuge. Our Indiana law is quite sufficient for the purpose of suppressing the pseudo medical cults, but the trouble of it is we are unable to enforce it. There seems to be a general contempt for all laws, and if a sentimental jury does not free a chiropractor or some other charlatan for practicing medicine without a license then the courts, with a perverted sense of justice, will set the verdict aside. As we often have said, there isn't much use in getting a law on the statute books if we can not enforce it.

DEATHS

CHARLES S. CLARK, M. D., of Decatur, died at his home there February 6. Dr. Clark graduated from the Eclectic Medical College, Cincinnati, in 1891.

DAVID GINTHER, M. D., of North Manchester, died February 13 at the age of seventy-five years. Dr. Ginther graduated from the Eclectic Medical College, Cincinnati, in 1891.

WILLIAM E. WISNER, M. D., died at his home in Columbus, February 8, at the age of ninety years. Dr. Wisner graduated from the Cincinnati College of Medicine and Surgery in 1870.

WILLIAM M. CASEY, M. D., died at his home in Seymour, February 28, as the result of apoplexy. Dr. Casey was seventy-five years of age. He graduated from the Medical College of Ohio, Cincinnati, in 1878.

W. H. NUSBAUM, M. D., of Indianapolis, died February 8 at the age of 67 years. Dr. Nusbaum graduated from Miami Medical College, Cincinnati, in 1881. He was a member of the Marion County Medical Society, the Indiana State Medical Association and the American Medical Association.

OSCAR VON BARANDY, M. D., died at his home in South Bend, February 8. Dr. Von

Barandy graduated from the University of Budapest, Hungary, in 1900. He was a member of the St. Joseph County Medical Society, the Indiana State Medical Association and the American Medical Association.

JOSEPH FREEMAN, M. D., sixty-nine years of age, died at his home in Sullivan, February 19. Dr. Freeman was a member of the Sullivan County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Ohio, Cincinnati, in 1879.

CALLIE A. RENNOE, M. D., died at his home in South Bend, February 11, of heart trouble. Dr. Rennoe was fifty-one years of age. He graduated from Rush Medical College, Chicago, in 1892, and was a member of the St. Joseph County Medical Society, the Indiana State Medical Association and the American Medical Association.

TONY L. BRYAN, M. D., died at his home in Evansville, February 24, at the age of sixty-four years. Dr. Bryan graduated from the Medical College of Evansville in 1882. He was a member of the Vanderburg County Medical Society, the Indiana State Medical Association and was a Fellow of the American Medical Association.

FRANK B. MORGAN, M. D., died of heart trouble at his home in Huntington, February 6. Dr. Morgan was fifty-three years of age. He graduated from the Medical College of Indiana, Indianapolis, in 1897. He was a member of the Huntington County Medical Society, the Indiana State Medical Association and the American Medical Association.

HENRY A. HUTCHESON, M. D., of Oaklandon, died at St. Vincent's Hospital, Indianapolis, February 15, at the age of forty-nine years. Dr. Hutcheson graduated from the Medical College of Indiana, Indianapolis, in 1903. He was a member of the Marion County Medical Society, the Indiana State Medical Association, and was a Fellow in the American Medical Association.

DAVID C. PEYTON, M. D., died February 6 at his home in Jeffersonville, at the age of sixty-five years. Dr. Peyton graduated from the Medical Department of the University of Louisville, in 1886. He was a member of the Medical Society of Virginia, the Clark County Medical Society, the Indiana State Medical Association, and was a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

COL. CHARLES FORBES has resigned as director of the United States Veterans' Bureau. He is now in Europe.

DR. G. A. SMITH, formerly of Bryant, has moved to New Haven where he will take over the practice of the late Dr. E. E. Morris.

THE state senate failed to pass the Beardsley bill which would commit Indiana to cooperation with the federal government under the Shepard-Towner Maternity Act.

THE Clinton County Medical Society held a meeting at Frankfort, February 15. Dr. S. B. Sims presented a talk on "Erysipelas" and Dr. Losey Harding presented a paper on "Septicemia."

THE Knox County Medical Society held a meeting in the Grand Hotel, Vincennes, February 13. Papers were presented by Drs. John W. Sluss and A. L. Marshall, both of Indianapolis.

THE Bartholomew, Jennings and Jackson county medical societies held a meeting at Columbus, January 31. A paper on "Skin Diseases" was presented by Dr. Frank W. Gregor of Indianapolis.

AT a meeting of the Indianapolis Medical Society and the Indiana Tuberculosis Association at the Hotel Lincoln, February 6, Dr. A. V. Hayes, of Chicago, read a paper on "Diagnosis of Lung Conditions."

DR. JOHN EMERSON MONGER, of Columbus, Ohio, has assumed his position as Director of the State Department of Health by the appointment of Governor Donahey. Dr. Monger succeeds Dr. H. H. Snively.

AMOS W. BUTLER, who has been secretary of the Board of State Charities for twenty-five years, has resigned to take a much needed rest. His efficient work has gained recognition by the officials of almost every state.

THE Jay County Medical Society held a meeting February 8, at Portland. A general discussion of the program for the society for the year 1923 was held. Dr. Ruby, of Union City, presented a paper on "Hereditary Eye Conditions."

Dr. Wilhelm Konrad Roentgen died in Munich, February 10, 1923. In his death the world has lost a scientist of fame. Dr. Roentgen not only was discoverer of the Roentgen rays but, in 1901, won the Noble prize for work in physics.

THE Northeastern Indiana Academy of Medicine held a meeting at Gawthrop Inn, Kendallville, February 26. Dr. Carl A. Hedblom, of Rochester, Minnesota, presented a paper on "Causative Factors and Treatment of Chronic Empyema."

A bill containing an appropriation of \$370,000 for hospitals, medical treatment and for the care and preservation of public health among the Indians passed the Senate, January 5. An item for the suppression of liquor and drugs was struck out.

THE fiftieth anniversary meeting of the Northern Tri-State Medical Association will be held at Cleveland, Ohio, April 10 to 11. The first day of the session will be devoted to surgical and medical clinics and the second day will be devoted to papers and discussions.

DR. VINCENT A. LAPENTA, of Indianapolis, has been notified by the King of Italy of his appointment as a Knight of the Royal Crown of Italy. The appointment came as the result of his discovery of a serum which proved of value during the war and in general surgical practice since.

THE Muncie Academy of Medicine held a meeting at the Hotel Roberts, Muncie, February 27. Dr. Carl Hedblom, of the Mayo Clinic, presented a paper on "Diagnosis and Treatment of Surgical Conditions of the Chest." The paper was discussed by Dr. W. D. Gatch, Indianapolis.

DR. and Mrs. C. J. Adams, of Kokomo, left February 17 for Boston, where Dr. Adams will take some special work in eye, ear, nose and throat diseases. On the first of May they will sail for Europe where they will travel extensively and where Dr. Adams expects to take more special work.

DANIEL G. REID recently donated fifty thousand dollars to the Reid Memorial Hospital, Richmond, with an additional fifty thousand dollars to be given contingent upon the city's raising a like sum for the purpose of enlarging the hospital. The Reid Memorial Hospital was erected at Richmond a number of years ago by Daniel Reid at a cost of one hundred thousand dollars.

A RESOLUTION has been adopted requiring the Special Hospitalization Committee, appointed in June 1921, to consider the charges of mismanagement, waste of funds and extravagant purchases of supplies in the Veterans' Bureau and to determine whether or not such charges should be investigated.

IN response to urgent representations by the German Red Cross, five thousand dollars has been sent by the American Red Cross to relieve distress among German children. According to reports, children in Germany are suffering privation this winter owing to the lack of milk and foods essential to their health.

IT has been announced by Dr. Henry Hanson, director of public health for the Republic of Peru and of the Peruvian yellow fever campaign carried out by the Rockefeller Foundation and the government that, for the first time in history, Peru is free from yellow fever. No cases have been reported since August, 1921.

THE Italian Medical Society of New York has been notified by the department of ophthalmology of the University of Rome that two assistantships are offered, without salary, to American medical graduates of Italian extraction. Living expenses will be paid. Information may be secured by applying to the Societa Medica Italiana, 47 West Forty-second street, New York.

THE University of Pennsylvania, through a bequest made by Edmund A. W. Hunter, will receive \$200,000 for the establishment of clinical surgery. The bequest was made with the provision that the addition to the university be known as the "Agnew and Hunter Department of Clinical Surgery" in memory of Dr. D. Hayes Agnew and Dr. Charles D. Hunter, son of the donor.

THE annual meeting of the Ohio State Medical Association will be held at Dayton, May 1, 2 and 3. The Eye, Ear, Nose and Throat Section of the Association has secured Dr. Robert Von Der Heydt, of Chicago, to deliver an address on "Slit Lamp Microscopy of the Living Eye, Its Aid to Histological Research and as a Refinement in Ophthalmic Diagnosis." Physicians from adjoining states are invited to attend this meeting.

E. S. GILMORE, superintendent of the Wesley Memorial Hospital, Chicago, has been appointed chairman of the National Hospital Day Committee to succeed Dr. Lewis A. Sexton. Dr. Malcolm T. MacEachern, Vancouver, B. C., Canada, is vice-chairman and Canadian director

for the movement. C. J. Cummings and Dr. Albert S. Hyman, Philadelphia, are the two new members appointed to the committee. Dr. Hugh S. Cumming, surgeon-general, U. S. Public Health Service, is also a member. The first call has been issued for the names of hospitals planning to observe the Third Annual Hospital Day, May 12, 1923. Suggestions for programs and other information will be sent, on request, by the Secretary, Matthew O. Foley, 537 South Dearborn street, Chicago.

DURING February, the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Eli Lilly and Co.:

Schick Test and Schick Test Control—Eli Lilly & Co.

Diphtheria Toxin-Antitoxin—Eli Lilly & Co.
H. K. Mulford Co.:

Pneumococcus Antibody Solution, Types I, II and III Combined—Mulford.

Parke, Davis & Co.:

Diphtheria Toxin and Control for the Schick Test—P. D. & Co.

Neo-Silvol

Mercurosal

Tincture No. 111 Digitalis—P. D. & Co.

THE program committee of the Eleventh Indiana Councilor District Medical Society, composed of Carrol, Cass, Miami, Wabash, Grant, Huntington and Howard counties, met at the Courtland Hotel, Kokomo, January 4, where arrangements were made for an extensive scientific program to be held at Kokomo, Thursday, May 17, 1923. One of the outstanding features will be a clinic by a noted orthopedic surgeon, who will also perform several reductions of congenitally dislocated hips. This is a most important advancement for the correction of deformity of crippled children. The physicians of this District are being asked to report all such hip cases and parents of such afflicted children wishing to avail themselves of this opportunity should report to their family physician.

AN annual prize of five hundred dollars bearing the title of "The Sofie A. Nordhoff-Jung Cancer Research Prize" has been founded by Dr. Sofie A. Nordhoff-Jung for the encouragement of researches in the etiology, prevention and treatment of cancer. The prize will be awarded by a commission composed of members of the University of Munich, Bavaria, and will be granted for the first time in December, 1923. The commission consists of Professors Borst, Doederlein and Sauerbruch, with Professor von Romberg as chairman. The award will be made

as a recognition of the most conspicuous work in the world literature bearing on cancer research, done at a time antecedent to the allotment of the award. Though the prize will not be awarded on a competitive basis, all research workers in cancer are invited to submit literature on this subject.

A special invitation is extended to all doctors, their families and friends, to join the special train tour of 27 days to California, for the American Medical Association Convention at San Francisco, June 25-29. Dr. Ralph S. Chappell, 305 Terminal Bldg., Indianapolis, Ind., has been delegated by the Indiana State Medical Association to arrange for the trip, and has secured the services of Mr. and Mrs. Vernon Hinkle, experienced in the work of organizing and conducting Special Convention Trains. Mr. and Mrs. Hinkle have organized and conducted by special train thruout the west such movements as the Indiana delegates to national democratic convention, the National Association of Creditmen, the Shriners to their Imperial Session, and the Benevolent Order of Elks. They are familiar with the territory over which the special train is to be run, giving to the physicians and their families a most interesting 27 day tour at actual cost.

The train will be assembled at Indianapolis, attaching cars to it at St. Louis, Chicago and Kansas City, and will be an all steel standard Pullman Observation Train De Luxe. The train will be equipped with valet, maid, and tonsorial service. A special all steel baggage car will be carried, equipped to permit dancing while enroute, and special stops will be made permitting swimming, golfing and horseback riding.

Associations or states assembling as many as fifteen people to make the trip, will be assigned a special steel Pullman at their home city, brought into Indianapolis, Chicago, or St. Louis, and attached to the special train.

On the going trip stops will be made as follows: Three hours at St. Louis, two hours at Kansas City, where an automobile tour of the city will be given, a stop of one day at Colorado Springs, where automobiles will meet the train and convey the party thru the Garden of the Gods and up the two million dollar double track boulevard to the summit of Pike's Peak. One day and one night will be spent at Troutdale-in-the Pines in Bear Creek Canyon near Denver. Dancing, swimming, golfing, and horseback riding will feature the stay at this restful spot in the very heart of the Rockies. A side trip and stop of one day at the Grand Canyon of Arizona will be made, arriving at Los Angeles in the early afternoon. Four days will be spent at Los Angeles. One of these days will be given over to an automobile tour of the city, Pasadena, the

different beaches, and the movie studios. One day will be devoted to the trip to Santa Catalina Islands, including a tour of the submarine gardens on the glass bottom boats. Two days by automobile, 150 miles along the Pacific ocean, thru Long Beach, the Old Missions, Ramona's Marriage Place, San Diego, Balboa park, Coronado Beach, and Ti Juana in Old Mexico. The route from Los Angeles to San Francisco is over the Coast lines, skirting the blue Pacific for miles. During the stay at San Francisco the party will be taken up the crookedest railroad in the world to the summit of Mt. Tamalpais, and thru Muir woods where are located the giant redwood of California.

Choice of return routing is granted, one party will be conducted back thru the Feather River canyon to Salt Lake and thru Yellowstone National park, returning via the D. & R. G. and the Royal Gorge. Another party will be conducted up the coast to Portland, taking in the famous Columbia River drive, visiting Seattle, Vancouver, the Canadian Rockies, Lake Louise, and Banff, returning home via St. Paul and Chicago.

Hotels, transfer of self and baggage, expense of sightseeing, all will be arranged for in advance, allowing the physicians and their families to enjoy at the least possible expense and in the least possible time a most wonderful tour of the golden west, free from all care and responsibility as there will be nothing left for the traveler to do but eat, sleep, and enjoy the companionship of friends.

SOCIETY PROCEEDINGS

COUNCILORS' MEMBERSHIP CONTEST

District	Councilor	Number of Counties	1921 Membership	1922 Membership to Date	Percentage
First.....	Dr. Willis	7	176	175	.99
Second.....	Dr. Smadel	7	149	148	.99
Third.....	Dr. Leach	9	130	119	.91
Fourth.....	Dr. Osterman	10	138	137	.99
Fifth.....	Dr. Weinstein	5	158	166	1.05
Sixth.....	Dr. Spilman	8	150	162	1.08
Seventh.....	Dr. Earp	4	425	445	1.06
Eighth.....	Dr. Conrad	5	172	169	.98
Ninth.....	Dr. Moffitt	10	253	257	1.02
Tenth.....	Dr. Shanklin	5	151	147	.97
Eleventh.....	Dr. Black	6	191	194	1.02
Twelfth.....	Dr. Van Sweringen	8	241	247	1.02
Thirteenth.....	Dr. Berteling	8	274	259	.95
		92	2608	2630	

MUNCIE ACADEMY OF MEDICINE

At a recent meeting of the Muncie Academy of Medicine, Dr. Daniel N. Eisendrath of Chicago presented a paper on the Diagnosis and Treatment of Renal Calculi, an abstract of which follows:

Dr. Eisendrath discussed under separate headings some of the more important of the recent advances in the special field of kidney calculus. The first of these dealt with the question of the formation and reformation (recurrence after operation) of calculi.

Every crystal is formed around a framework of colloid material. Both of these are present in normal urine and if there is an excess of crystalline substances, they are apt to be precipitated and a cal-

culus formed around a colloid skeleton framework. Uric acid, oxalate and cystin calculi are most often found in noninfected and the phosphatic calculi in infected kidneys. Interference with the urinary stream, i. e., stagnation favors the formation of calculi and the occurrence of infection. The same is true of a disturbance of innervation as found after spinal cord injuries. Calculi have been recently produced experimentally by injecting strains of organisms obtained from a man who had recurrent calculus formation.

The question of reformation of calculi is very important because it is inadvisable to operate on kidneys which are the seat of infection unless the calculus is blocking the outlet of the kidney, because there is a great likelihood of calculi reforming. Statistics of various operators show a recurrence in 10 per cent. after operation. Many of the cases are no doubt instances of calculi having been overlooked at the primary operation, but this is less likely to occur today than formerly.

Under the second heading were discussed the recent advances in diagnosis and differentiation from other conditions. With our present technic we are able to see the shadow of the kidney in the majority of cases and this has enabled the surgeon to localize the shadow of a calculus as to its being (a) in the renal pelvis; (b) in dilated calyces, and (c) in the parenchyma. This was of the greatest possible aid in planning which type of operation should be performed. Uric acid and cystin calculi were the most difficult to be demonstrated and altogether it is estimated that the x-ray failed to show shadows in about 2 to 15 per cent. of all cases when calculi were present.

If a shadow was seen in the kidney area one could prove it to be that of a renal calculus by the use of pyelography. The latter then included the shadow of a renal calculus. A number of slides were shown illustrating how this method of diagnosis had been applied in the speaker's cases, especially in the differentiation of gall-stone shadows which at times greatly resembled those of kidney stones. Lateral radiography and the use of the x-ray catheter were also of great value in the differentiation of extra-renal from inter-renal shadows. Lateral radiography was of great help if one suspected the presence of superimposed calculi.

The third heading took up the clinical pictures under which renal calculi presented and emphasis was laid upon the fact that there was no pathognomonic group of symptoms. Since many other conditions both within and outside of the kidney could give rise to colics, localized pain, hematuria, fever, etc., a thorough urologic study of every case would be rewarded by more accurate diagnoses.

Under the last heading the indications for operation and the technic were discussed and illustrated by slides.

Cases of calculous anuria and of acute blocking with resultant hydronephrosis required immediate attention. If ureteral catheterization did not relieve calculous anuria within forty-eight hours, operative interference should not be delayed any longer.

Less urgent, but also requiring operation, were cases where the outlet of the renal pelvis was blocked with resultant damage to the kidney function. Even if the calculus was small, multiple calculi should be operated if the functional tests and pyelography showed that the kidney was considerably damaged, provided that infection was not so extensive that recurrence was probable. Even under the latter condition, a pyelotomy and small nephrotomy incisions would greatly prolong life and nephrectomy not considered unless the opposite kidney was normal. Large branching calculi did not

offer much prospect of cure after operation. They were likely to recur and one should abstain from operative interference if possible.

In bilateral cases, various combinations occurred: (a) calculi in both kidneys; (b) in one kidney and opposite ureter; and (c) in both ureters. In bilateral single the indications were as for unilateral single, i. e., operate if the pelvis was blocked. In cases with multiple scattered calculi, leave them alone unless relief from pain and infection was indicated. Pyelotomy either by the ordinary or by the more recent enlarged technic was the operation of choice since bisection of the kidney was often followed by late bleeding. Small nephrotomy incisions were far preferable to the larger older nephrectomy incision. Nephrectomy was indicated when the kidney was hopelessly destroyed and the opposite one had a normal function.

Slides were shown illustrating all of the operations and the most recent advances in technic.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

BACILLUS ACIDOPHILUS MILK-LEDERLE.—Whole milk cultured with *Bacillus acidophilus*. It contains not less than fifty million of viable organisms (*B. acidophilus*) per Cc. During recent years reports have been published which indicate that the growth in the intestinal canal of the normally present *Bacillus acidophilus* may be increased so as to make it the predominating organism, by the administration of milk inoculated with *B. acidophilus*, by the administration of lactose alone. The therapeutic value of cultures of *B. acidophilus* is still in the experimental junction with lactose (sugar of milk) or by administration of viable cultures of *B. acidophilus* in constage. For a discussion of the actions and uses of acid ferment preparations, see New and Nonofficial Remedies 1922, p. 156. *Bacillus acidophilus* milk-Lederle must be kept on ice and should be used within one week of the expiration date which appears on each package. Lederle Antitoxin Laboratories, New York. (*Jour. A. M. A.*, Feb. 3, 1922, p. 323.)

THEOCIN SODIUM ACETATE.—A brand of theophylline sodio-acetate—N.N.R. (See New and Nonofficial Remedies 1922, p. 357). Winthrop Chemical Co., New York. (*Jour. A. M. A.*, Feb. 10, 1923, p. 401.)

DIPHTHERIA TOXIN AND CONTROL FOR SCHICK TEST.—P. D. & Co. Diphtheria Immunity Test (New and Nonofficial Remedies 1922, p. 320), marketed in packages containing one vial of 0.1 Cc. of undiluted, standardized diphtheria toxin, one vial of 5 Cc. of sterile physiologic solution of sodium chloride, one vial of 5 Cc. of diluted control of Schick test and one sterile syringe point. Each package contains material sufficient for fifty doses. Parke, Davis & Co., Detroit, Mich. (*Jour. A. M. A.*, Feb. 17, 1923, p. 475.)

DIPHTHERIA TOXIN-ANTITOXIN MIXTURE.—Lilly. A diphtheria toxin-antitoxin mixture (see New and Nonofficial Remedies 1922, p. 282), each Cc. constituting a single human dose and containing 3 L+ doses prepared in accordance with the requirements of the U. S. Public Health Service. Marketed in packages of three vials sufficient for one treatment. Eli Lilly & Co., Indianapolis, Ind.

SCHICK TEST.—Lilly. A diphtheria immunity test (see New and Nonofficial Remedies 1922, p. 320) marketed in packages containing one vial of diphtheria toxin sufficient for ten tests and a vial of sterile physiological solution of sodium chloride and in packages of ten vials containing toxin sufficient for one hundred tests accompanied by ten vials of sterile physiological solution of sodium chloride. As

a control, the Schick test control, representing diphtheria toxin of the same lot treated to destroy the specific exotoxins is supplied. Eli Lilly and Co., Indianapolis, Ind. (*Jour. A. M. A.*, Feb. 25, 1922, p. 553.)

PROPAGANDA FOR REFORM

GINSENG.—Ginseng has found no place in modern therapy. However, it has been reported that infusions of the extract of ginseng root are diuretic. But the most recent study has shown that the drug does not affect the nitrogen metabolism. Even the quack would find it difficult to discover a tenable potency on the basis of which the use of ginseng could be "boosted." (*Jour. A. M. A.*, Feb. 3, 1923, p. 328.)

MERCUPRESSIN.—From the advertising issued by the Barsa Chemical Co., Inc., 28 W. 23rd St., New York for Mercupressin, this product is essentially the same as that which the Spiroside Corporation, 28 W. 23rd St., New York, marketed as "Spiroside." Spiroside was claimed to be composed of metallic mercury, copper sulphate, cypress cones, henna, nutgalls and dried pomegranates. The product was sold in the form of tablets. For use the tablets were ignited and the fumes inhaled by the patient. The Council on Pharmacy and Chemistry held that the claims for Spiroside were unproved and unwarranted and that the routine use of an inexact method for the administration of mercury is detrimental to sound therapy. The Council's rejection of Spiroside was subsequently fully sustained by the investigation of the inhalation treatment of syphilis carried out by Cole, Gericke and Sollmann. (*Jour. A. M. A.*, Feb. 3, 1923, p. 344.)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Healing Springs Water (Virginia Hot Spring Co.), a moderately mineralized water, containing bicarbonates of calcium and magnesium, and magnesium sulphate (Epsom salt); Brick's Sarsaparilla (Palestine Drug Co.), containing small amounts of sodium salicylate, potassium iodide, plant drug extracts, including sarsaparilla and a laxative drug, sugar, alcohol and water; Yerk's Wine Extract of Cod Liver Oil (Yerk's Chemical Co.), consisting essentially of compounds of sodium, potassium, calcium, iron, quinine, strychnin and phosphorus, extracts of plant drugs, possible traces of cod-liver oil, malt extract, sugar, alcohol and benzaldehyde as a flavoring; Anemia Tablets (Carlos M. Rivoli), containing 95 per cent. of milk sugar and small quantities of cinchona alkaloids, charcoal, sulphur, gum and compounds of arsenic, phosphorus, iron and sodium. (*Jour. A. M. A.*, Feb. 3, 1923, p. 343.)

BAYER 205.—This is said to be a specific trypanosomid. It is said to have no effect on organisms other than the trypanosomes, even those that are nearly related such as the spirochetes. Most of the work carried out in this country has been carried out with small laboratory animals, but the successful treatment of two human cases of trypanosomiasis is reported. The composition of Bayer 205 is secret, though a hint as to its chemical composition has been discovered which suggests that it is a dye of the naphthalene series. It is hoped that in the near future the exact composition of Bayer 205 will be declared so that scientists will feel justified to carry out controlled experiments with the drug. For the present the preparation is in the experimental stage. (*Jour. A. M. A.*, Feb. 10, 1923, p. 406.)

A PATENTED CONSUMPTION CURE.—The U. S. Patent Office has issued patents for many preparations to be
(Continued on Advertising Page xx)

Be SPECIFIC, EMPHATIC, and DEMAND *Armour's* When Prescribing ENDOCRINES



Headquarters
for
the
ENDOCRINES

Your patients are entitled to pure drugs. Your prestige as a diagnostician and therapist is, too. You want results. Cheap, inferior goods (cheap stuff is always inferior) will not give desirable results.

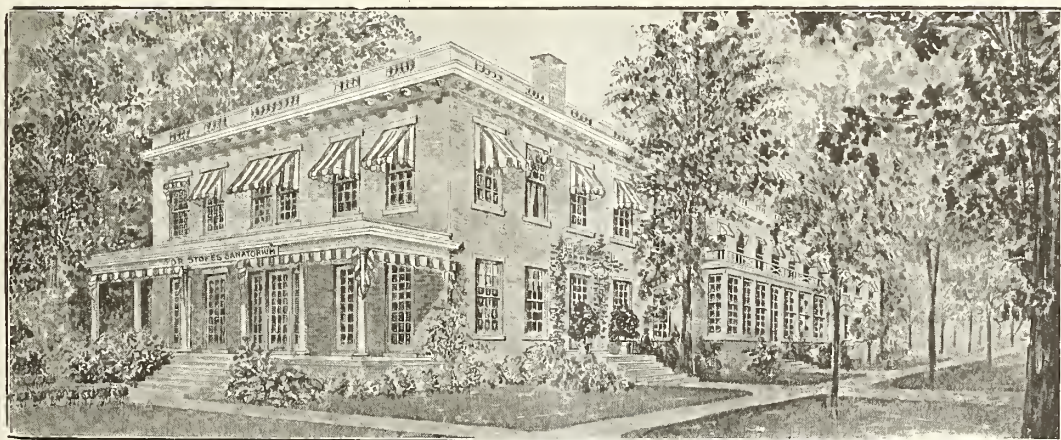
Write "*Armour's*" when using Corpus Luteum, Thyroids, Ovarian Substance, Pituitary Products, Pituitary Liquid, Suprarenalin Solution and other organo-therapeutics.

*Our booklet on the En-
doctrines will interest you*

ARMOUR AND COMPANY

CHICAGO

DR. STOKES SANATORIUM



HOME FOR THE INCURABLE INSANE, AGED AND INFIRM

A strictly modern sanatorium, fully equipped for the scientific treatment of all nervous and mental affections. Situation retired and accessible.

Alcoholic and Drug Habit Treated by the Gradual Reduction Method Only

An addition of thirty rooms has lately been added to our already large sanatorium. This makes it possible for us to separate all male and female mental patients. For details write

DR. STOKES SANATORIUM

923 Cherokee Road

EDGAR W. STOKES, M.D., Supt.

Louisville, Kentucky

(Continued from page 114)

used in medicine for which there has not been the slightest scientific justification. The most recent and most flagrant lack of intelligent patent law administration is to be found in a patent issued to Sergluson and exploited by the Savrite Medical Manufacturing Co., Los Angeles, Calif., for an alleged cure for tuberculosis.

This is the patented cure: Pure olive oil 1 gallon, squill root 3 pounds, bitter almonds $1\frac{1}{4}$ pounds, nettle (the plant except the root) $1\frac{1}{2}$ pounds, red poppy flower petals 1 pound. These various ingredients are to be mixed, put in a closed container, gradually warmed and left standing for about 72 hours, when the mixture is squeezed, mixed and filtered. The filtrate comprises the "cure." (*Jour. A. M. A.*, Feb. 10, 1923, p. 420.)

THE PATENT OFFICE A FEDERAL RIP VAN WINKLE.—No branch of our government is of greater importance to the progress of the country than the Patent Office provided it is intelligently administered. When the Patent Office is used, however, for an extension of the nostrum business founded on the abuse of patent and trademark laws, it becomes a menace to public health. In 1918 a report of the Committee on Patent Law Revision of the Council on Pharmacy and Chemistry recapitulated the effort made for years by the American Medical Association to bring about patent law reform and detailed some of the cruder forms of Patent Office insufficiency in the granting of patents for medicaments. The issuance recently for a patent on a preposterous mixture of squill root, nettle and red poppy flowers in olive oil as a remedy for tuberculosis is a further illustration of patent office incompetency.

Both common sense and consideration of the health of the public suggests that the patent office should consult the scientific departments of the United States government conversant with medicine and therapeutics in the issuance of patents on medicinal preparations. (*Jour. A. M. A.*, Feb. 10, 1923, p. 405.)

STRYCHNIN AND DISTURBANCE OF THE VISION.—The use of strychnin in the treatment of certain visual disturbances appears to be extensive. Its use in ophthalmology was introduced in 1830. In text books the claims for the usefulness of the drug in these conditions run from mere assertions regarding the usefulness of the drug in certain eye conditions to statements that it actually increases the acuity and field of vision within an hour after injection of therapeutic doses. Occasionally there is a statement to the effect that the good results from strychnin are due to psychic influences. And now, ninety-two years after its proposed use, experiments have been made to indicate that the latter opinion is probably correct and that strychnin is without action on vision. (*Jour. A. M. A.*, Feb. 10, 1923, p. 406.)

BROWN'S NEW CONSUMPTION REMEDY.—The Postoffice Department has issued a fraud order against B. H. Brown, M. D., of Jacksonville and St. Augustine, Fla., and Brown's Magnolia Remedy Co. For some time Dr. Brown, a negro, has been advertising Dr. Brown's New Consumption Remedy, especially to members of his own race who are afflicted with tuberculosis. In 1917 the federal authorities prosecuted Brown under the Food and Drugs Act, holding that the claims for the preparation were false and fraudulent. Though convicted, he continued making his claims in newspaper advertisements, and in circulars that answered these advertisements. While the Department of Agriculture is helpless to prevent this form of fraud under the provisions of the Food and Drugs Act, the Postoffice authorities are able to reach this form of fraud. The Department filed charges against Brown and after hearing the defense issued a fraud order against Magnolia Remedy Co.

and E. H. Brown. (*Jour. A. M. A.*, Feb. 17, 1923, p. 495.)

ALLEN'S GOITER TREATMENT.—At Sheffield, Iowa, the Allen Remedy Co. conducts a mail order business in "Dr. C. J. Allen's Goiter Treatment." The A. M. A. Chemical Laboratory analyzed the Allen nostrum and found it to consist essentially of ferrous iodide and hydrogen iodide (hydriodic acid) in a colored and flavored syrup. The serious side of the Allen Goiter Remedy Co. business is the indiscriminate sale of the nostrum to those who may be, and are likely to be suffering from exophthalmic goiter. It is well known that the use of iodid is likely to aggravate this disease and hence it is not surprising that physicians are beginning to report serious results from the use of the Allen preparation. (*Jour. A. M. A.*, Feb. 24, 1923, p. 572.)

BOOK REVIEWS

DISEASES OF THE NOSE AND THROAT. By Cornelius G. Coakley, Professor of Laryngology and Otology in the College of Physicians and Surgeons, Columbia University; Attending Surgeon, Bellevue Hospital. Sixth Edition, revised and enlarged. Illustrated. Cloth, 665 pages. Price, \$4.25. Lea and Febiger, publishers, New York and Philadelphia. 1922.

This sixth edition, revised and enlarged, of a compact manual of diseases of the nose and throat, will be welcomed by many students and practitioners of medicine. It is an excellent textbook and has been brought up to date. As in previous editions much emphasis has been placed upon examination, diagnosis and treatment. We especially desire to commend the author for his conservatism. For instance, we are glad to note that he is not such a rabid enthusiast concerning the efficacy of the vaccine treatment as either a preventive or curative measure in colds and sinus diseases, and we like his condemnation of the ultra radical accessory sinus operations which so often leave the patient in a worse condition than before. His ideas of operative attention are based upon a commendable desire to preserve functional activity without needless destruction of tissue. Throughout the book there is every evidence of safe and sane instruction concerning the management of every phase of nose and throat diseases, and we heartily commend the book for the purposes for which it is intended.

THE PRACTICAL MEDICINE SERIES for 1921 comprising eight volumes on the year's progress in medicine and surgery. Under the general editorial charge of Charles L. Mix, A.M., M.D., professor of physical diagnosis in the Northwestern University Medical School. Price of the eight volumes, in cloth, \$12.00. The Year Book Publishers, Chicago.

We have received the 1921 series of eight volumes of the Practical Medicine Series which gives in abstract form the latest advances covering the entire field of medicine and surgery. Each volume is edited by one or more well known clinicians who are acknowledged specialists in the particular fields that they are representing in the Practical Medicine Series. The Series is published primarily for the general practitioner, though the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire. The volumes range in price from \$1.75 to \$3.00, and the price for the entire series is \$12.00. The eight volumes represent the year's progress in medicine and surgery, and we heartily recommend them to every progressive doctor who wishes to keep abreast of the times.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XVI

APRIL 15, 1923

NUMBER 4

ORIGINAL ARTICLES

HEART DISEASE: ITS MODERN CONCEPTION AND TREATMENT*

G. W. McCASKEY, M. D.
FORT WAYNE, INDIANA

The clinical importance of heart disease is emphasized by the fact that out of the 1,142,558 deaths from all causes in the United States in 1920, 134,143, about one in eight, were reported as due to this cause, or about 20,000 more than its nearest competitor, pneumonia.

The deaths from organic heart disease, however, it should be emphasized, do not come even close to representing its clinical and economic importance. In the first place, a very large contingent of these cases go through life with hearts somewhat crippled and with correspondingly lowered efficiency, live out the greater part of their expectancy, and go into the mortality statistics in some other class. Perhaps a larger contingent with lowered resistance, due to cardiac insufficiency, die from intercurrent disease, largely acute infections from which they would recover but for the organic heart disease. It is quite likely that one-fifth of the total mortality of the civilized world may be due directly or indirectly to organic heart disease. It is my opinion that a clearer understanding of its incidence and rational management would greatly reduce this enormous mortality.

HISTORICAL SKETCH

Forty-two years ago when I began giving medical clinics before students of the Fort Wayne College of Medicine, diseases of the heart occupied a prominent and rather favorite place in the roster of cases. Cardiology as a special field of clinical work was not born. In attempting now to analyze my diagnostic impressions of that time, it seems to me that the tendency was to make the stethoscope the highest court of appeal, and valvular defects the *sine qua non* of cardiac pathology. The great work of Walshe had rather recently appeared,

emphasizing a broader view, although eighty-one pages are devoted to the refinements of auscultation—a space out of proportion to its importance.

A little later (1876) appeared the American edition of the English translation of Ziemssen's cyclopedia of the practice of medicine, with important monographs by Rosenstein and Schroetter in which the paramount importance of the myocardium was for the first time properly stressed.

About ten years later (1885) or some thirty-seven years ago, Peppers' system of Medicine was published. The monograph on diseases of the heart muscle was written by Dr. William Osler. As might have been expected, modern cardiology was nearing its accouchement. Along with Osler were associated A. L. Loomis, the elder Flint and J. M. Dacosta. It is rather amusing in the light of our present knowledge to find exophthalmic goiter classified and discussed as a neurosis of the heart.

The next important landmark (1895) was the pretentious and very comprehensive monograph of 450 pages of Dr. James T. Whittaker, of Cincinnati, in the Twentieth Century Practice of Medicine. Under the caption of "Diseases of the Heart and Pericardium", he singly discussed the entire subject. The spell of the stethoscope had been broken. When Laennec's brilliant discovery was given to the world, heart sounds, normal and abnormal, occupied the center of the stage for half a century. It would seem as though in this work of Dr. Whittaker that the pendulum may have swung a little too far the other way. However, the diagnostic value of the stethoscope in the study of heart disease had apparently been stabilized and it had been assigned a permanent place of the utmost importance.

Seven years later, in the second year of the present century, an incident occurred which marks an epoch in the history of the study of heart disease. This was the publication in book form of the various papers by James Mackenzie, first of the arterial pulse, and later of the joint arterial and venous pulses. The cardinal incidents of the cardiac cycle, which stand in a certain relation to the different phases of the pulse

(*) Read by invitation before the Tippecanoe County Medical Society at Lafayette, Indiana, January 9, 1923, and before the Grant County Medical Society at Marion, Indiana, February 27, 1923, with lantern slide illustrations.

tracings, could thus be directly studied. The immediate result was an immense broadening of our clinical knowledge of heart disease.

The importance of, and even necessity for, additional data of cardio-vascular phenomena was forcibly stated by Mackenzie in the volume above referred to. He says, "Patients at rest may be in danger of rapid or sudden failure of the heart, yet all our methods of clinical examination are entirely at fault in giving us warning. The careful feeling of the pulse may show it to be of good arterial pressure, without flaw in strength or rhythm. The examination of the heart may reveal no sign of impending change, nor of its damaged condition."

From their first introduction I felt the need of whatever help could be obtained from these diagnostic aids. Not long ago I found fragmentary remains of my first venture—a Dudgeons sphygmograph which was, admittedly, of very limited value, and also its immediate successor, consisting of this sphygmograph with Mackenzie's jugular attachment. This was the immediate predecessor of Mackenzie's ink polygraph, an instrument of great efficiency with which this work is now being done.

The next step in the evolution of precision in cardiac diagnosis was made the following year (1903) after the publication of Mackenzie's book already mentioned. This consisted in the introduction by Einthoven of the galvanometer string, which, being placed in the field of two powerful electro-magnets, is deflected when the heart currents are passed through it by means of electrodes attached to each arm and the left foot. A shadow of this string, produced by an arc light, is projected through a microscope and, striking a mirror, is reflected through a slit upon a photographic film, which is revolving by clock work at an adjustable rate of speed. When the galvanometer string is at rest, a straight line is recorded on the film. With each change in electrical potential in different parts of the heart, currents of varying intensity and direction are sent through the string by a suitable combination of electrodes, switches and wires. In accordance with well-known physical laws, the string is deflected in one direction or the other, each deflection enormously magnified by the microscope, is recorded on the photographic film, constituting one of the so-called "waves" of the cardiac cycle.

Now while we owe to Einthoven the introduction of the galvanometer string into clinical cardiology, we are indebted to Thomas Lewis, of London, for its clinical development. With its clinical apurtenances, it constitutes the electrocardiograph, which may, I think, be justly characterized as the greatest technical achievement in diagnostic medicine. It has laid bare before the eyes of the clinician much of the com-

plex mechanism of the heart with a precision which challenges admiration and furnishes data of the highest value for a clinical judgment. The succession of cardiac events can be graphically recorded to the fiftieth or even the hundredth part of a second. When it is remembered that upon the speed and regularity with which these events follow each other hinges the diagnosis of heart block and allied conditions, its vital importance will be fully realized.

Every fact above mentioned in the development of modern cardiology has occurred within my own experience, indicating the relatively rapid evolution of the entire subject.

ETIOLOGIC DIAGNOSIS

Let us now briefly consider the etiology of heart disease. Among the potential causes of cardio-vascular disease we may first mention hereditary predisposition. There is just as much difference between the size, construction and strength of hearts as there is of stomachs or brains. Take the mere question of size and we will readily see that one heart may have a great deal more muscle than another in proportion to the weight of the body. Other things being equal, the larger mass of muscle can do more work than the smaller without overstrain. It can endure more mechanical and toxic stress without disturbance. This viewpoint is fundamental and should be kept constantly in mind in estimating the etiologic factors in any given case.

Another event of very great importance is physical stress. Every time that more or less severe physical work is done, an extra demand is made upon the cardio-vascular mechanism.

The quantity of blood circulating through the skeletal muscular apparatus which constitutes a large percentage of the body weight is increased several times. The blood pressure rises very greatly and an extra stress is thrown upon both the cardiac and the vascular walls. The elastic recoil of the one and the muscular power of the other is strained to a point more or less extreme, varying with the degree of effort. Arteriosclerosis and cardiac muscular changes are among the results and these play an important role in the evolution of heart disease.

The large majority of all cases of heart disease, however, may be attributed to one group of causes, and these may be summed up in the one word, "Infections". If all infections, focal and general, could be eliminated, heart disease would be an infrequent clinical phenomenon.

So far as the acute general infections are concerned, it is the general belief of clinicians today that in no such case does the heart run this gauntlet without damage, more or less severe. The results may be lasting or transient, according to the severity of the injury, and the care exercised during convalescence. The responsibility of the medical adviser in conserving the

heart in such cases and thereby avoiding the handicap of chronic cardiac inefficiency is very great. The damage may consist in endocarditis, myocarditis, pericarditis, or quite as likely, pancarditis, or simply structural alterations caused by toxins from which recovery may be only partial, possibly leaving behind crumpled valves, myocardial degeneration, etc.

The chronic specific infections in this latitude are practically limited to syphilis and tuberculosis, and these two diseases play a tremendous role in the incidence of heart disease; syphilis directly attacking the heart, while tuberculosis, with a few exceptions, indirectly affects the heart by means of toxins absorbed into the general circulation or by resulting mal-nutrition. Aside from these acute and chronic specific infections, we have to consider the acute and chronic non-specific infections, the former comprising the acute septic processes and the latter, the so-called focal infections. The acute processes, whether specific or non-specific, produce damage which may or may not disappear with the cause, although in the great majority of cases a certain degree of damage remains either for a long time or permanently. The chronic focal infections require full and careful consideration in appraising the importance of the cardiac pathology in any case.

Along with infectious toxins, possible excessive thyroid secretion must receive careful attention.

It will thus be seen that the breadth and complexity of the etiologic problems in any given case are very great. It is worse than useless to proceed with therapeutics before the etiologic factors have been worked out. According to the special indications in each case, this may include the use of serology, a more or less complete clinical study of the blood, including, perhaps blood chemistry, blood counts, Vanslyke's CO_2 combining power of the plasma, the determination of the presence or absence of focal infections by such means as the x-ray, non-surgical drainage of bile passages; the genito-urinary tract, etc.—in short, a broad and more or less exhaustive clinical study of the case. A cardio-vascular diagnosis, limited to the cardio-vascular mechanism, is a clinical fiasco.

Let us endeavor at this point to consider the patient from the patient's point of view and try to appraise the clinical value of whatever symptoms may be presented or indicated in the history and determine their clinical value also from the patient's viewpoint, which means their significance, especially with reference to possible heart failure, and also to disturbing symptoms of cardiac disorder.

THE CARDIAC DIAGNOSIS

Having determined the etiology as accurately as possible, the strictly cardiac diagnosis remains for determination.

The anamnesis is perhaps the most important preliminary, and has presumably been already carefully made. This may disclose frank cardiac symptoms, or it may be one of those very important cases in which fatigue symptoms, without special reference to the heart, constitute the main complaint. I wish to emphasize the great clinical importance of excessive fatigue as a symptom of cardiac weakness, either entirely alone or associated with other definite symptoms of cardiac disease.

Among the symptoms and signs presented by the patient, we have to consider rate, rhythm, or regularity, abnormal sensations, precordial pain, dyspnea on exertion, each one of which will have to be studied with special reference to the anamnesis and certain other data to be obtained by examination.

The rapidity of the heart action varies so much from such a large variety of causes that it is very difficult to determine its clinical value as a sign of cardiac disease. An increase of more than 50 per cent in the frequency of the heart action can occur without any important intra-cardiac morbid condition so that, standing by itself, it has little or no diagnostic value in the study of heart disease.

The arrhythmias of the heart usually but not always have some more important cause, either intra-cardiac or extra-cardiac, disturbing the regularity of the controlling mechanism. Anything like a complete study of the cardiac arrhythmias would be manifestly impossible in the present paper. All one can do is to stress their general importance, at the same time remarking that some of them are very serious and others not so. It is only by the use of graphic methods and especially the electrocardiograph that the precise mechanism of the arrhythmias, in at least many of these cases, can be cleared up. They were not understood until its advent. They are due in part to impairment of the conducting system which conveys the impulses from the sino-auricular node to the ventricle and along the paths of the conducting bundles; partly to a displacement of the initial impulse from the sino-auricular node to some part of the auricular or ventricular wall.

It will be impractical here to discuss the physical examination in detail, nor is it necessary to do so. Its significance and interpretation have been clarified immensely by the advances made during the last couple of decades. Its importance is just as great as ever in spite of the newer methods and should not be in any way neglected. We learn much that cannot otherwise be so easily learned in regard to the actual condition of the heart and the seriousness of any pathology which may be present. Inspection may reveal much in the way of position, force of impulse, and so forth. This is

also true of palpation, with reference to impulses, thrills, etc.

The heart outline should be as carefully determined as possible by percussion, although when available, the fluoroscope or x-ray plate gives us these outlines much more dependably and accurately. The radiogram, in addition, gives us accurate information in regard to the aorta, which is only second in importance to the heart. The competency of the valves, the character and tone of the heart sounds and the rhythm of the heart action can be cleared up to a great extent by the careful use of the stethoscope. The information thus obtained must be kept in the range of the mental vision in order to evaluate the entire clinical complex.

In our effort to determine the safety of the patient with reference to cardiac failure and so forth, a number of special examinations have been added to the list, and in suitable cases are worth more or less their cost.

VITAL CAPACITY

Among the tests of cardiac efficiency, the vital capacity of the patient, or the largest possible amount of air which can be inhaled into the lungs after a forced expiration, really gives information easily worth the slight trouble involved. The normal standard for vital capacity is variously determined, but the body surface estimated in square meters is about as reliable as any. It has the advantage of taking the figure obtained in basal metabolism determinations, which latter will be necessary if the thyroid question has to be considered in the case, and the normal standard has been set at $2\frac{1}{2}$ liters per square meter of body surface for males and 2 liters for females, somewhat modified according to occupation. A very great lowering of vital capacity is found in other conditions than heart disease, and tuberculosis especially has to be excluded. A lowering of the vital capacity to 50 per cent of the normal, if this is due to heart disease, which can only be determined by the clinical study of the case, so far compromises the circulatory mechanism that the patient is practically bedridden. My present judgment, based on a rather limited experience, is that it furnishes valuable confirmatory evidence of cardiac efficiency or inefficiency when other possible causes are eliminated. At least, it is a physiologic asset quite worth while in a general diagnosis.

EXERCISE TEST

Perhaps the most dependable sign of cardiac failure on the one hand or efficiency on the other is the immediate effect of exercise upon the heart. When active exercise is taken by the patient, involving the use of a large number of skeletal muscles, the demand for blood to maintain the circulation increases several times, and the strain upon the heart is correspondingly

greater, according to the severity of the exercise.

The manner in which the heart responds to this demand is one of the very best indices we now have to determine the question of cardiac strength or failure. If, under normal conditions, the heart is contracting 70 times per minute and each ventricle is propelling 60¹ cc. of blood, each minute there would pass through both ventricles 8,400 cc. of blood, which would represent the normal working capacity of that heart. If the demand for blood is doubled 16,800 cc. of blood would have to be propelled by the heart in order to meet the demands. The heart can respond to this increased demand in several ways. Its rate may be increased or the quantity of blood that it propels with each systole may be increased, but one or both of these factors must be so adjusted as to meet the demands of the moment or dyspnea will result. Certain changes in the blood pressure must also occur in order that the tension of the blood may be sufficient to force it through the cardio-vascular apertures rapidly enough to meet the additional stress. In our exercise test, therefore, we have to consider the four factors, heart rate, blood pressure, respiratory rate and heart volume, only the first three being susceptible of direct observation. Therefore, in all of these observations we are reckoning with an unknown and therefore unmeasurable factor. The volume change in the heart would increase the systolic output to an unknown degree. When a patient makes two or three ascents of a stairway or does some other physical exercise making demands upon the heart, the heart rate should increase possibly 15 to 25 or more beats per minute and the blood pressure go up 10 to 20 mm. of mercury, and the respirations increased 5 or 10 per minute. The fourth factor, as already indicated, cannot be determined.

Under physiological conditions, if the patient, after such exercise, is placed at complete rest, the heart rate, the blood pressure and the respirations should drop appreciably each minute and in about three minutes should return to normal. No absolute formula can be given for a normal heart, but there are extremes met with which we know are pathologic and it becomes a question of clinical judgment as to how far the phenomena in any given case deviate from health. If, for instance, it takes 5 to 15 minutes or longer for these different factors to get back to the normal, we may be certain that there is a very marked lowering of cardiac efficiency. In the extremest degrees of cardiac failure, walking across the room may produce all the phenomena last described, the two tests representing different grades of cardiac inefficiency. A drop in either the pulse rate or blood pressure or both with exercise is always pathological. The best we can do at present is to regard the exercise

(1) Starling's "Human Physiology", 1912, page 1031.

test as above described as one factor in the formation of a clinical judgment, which in its final form must take into account every detail of the case, including history, symptoms, signs and tests.

GRAPHIC METHODS

On account of the highly technical character of the graphic methods, they may seem beyond the scope of the work of the general practitioner and, therefore, inappropriate in a paper designed for him. If, however, he aspires to a practical clinical knowledge of a subject which daily confronts him, it is, in my opinion, absolutely essential that he should have a general knowledge of these subjects. There will soon be within his reach, and in many places now are, well equipped laboratories and hospitals where this work so essential to a proper understanding of many cases of cardiac disease can be done, and it is not asking too much of him to know enough about it to either make his own interpretation or check up those furnished him. They do not belong to the heart specialist in any exclusive sense. As a general diagnostician, I require their supplementary aid.

These technical methods are not essential in every case of heart disease, and they must be regarded usually, not as definitely determining the pathology of a case, but simply as furnishing a broader basis upon which to rest the clinical judgment.

As already indicated, we have at present two methods of obtaining graphic tracings for the study of cardiac function—namely, the polygraph and the electrocardiograph. Where the patients cannot be taken to the electrocardiograph, the polygraph can be taken to them and will give us valuable information. The relationship of the main events of the cardiac cycle can be determined with sufficient accuracy to make the record of decided value.

With a suitable apparatus, which is completely assembled when the containing case is opened, this can be done in ten or fifteen minutes' time. It is, however, one of the limitations of the polygraph that occasionally a really satisfactory tracing is extremely difficult to obtain. A sample polygram of a normal heart is given in Fig. 1 as the basis of a very brief description of the diagnostic procedure.

In this figure (1) is the time marker, which indicates divisions of $1/5$ th of a second. (2) Is the tracing of the radial pulse. (3) Is the record of the impulses produced by the jugular vein. Neither the radial tracing nor the jugular tracing, standing alone, has much diagnostic value. This is especially true of the venogram, which is so utterly bizarre and irregular in its outline as to defy interpretation. It has practically no value excepting as correlated or synchronized with the arteriogram. It is practic-

ally impossible to get both of these pens precisely one above the other. Two vertical lines are made, one by the radial pen (4) and the other by the jugular pen (5) when both are stationary and the exact time relationship of these two lines or ordinates determined by measuring

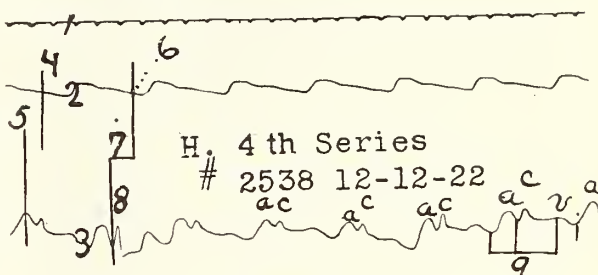


FIGURE 1

Polygram of Mrs. H.

Case No. 2538—4th Series.

1, time marker. 2, radial pulse tracing. 3, Jugular vein tracing. 4, Radial pen ordinate. 5, Venous pen ordinate. 6, Point 1 of second before radial upstroke, indicating beginning of systole. 7, Horizontal line synchronizing radial and venous pens. 8, Vertical line intersecting c wave at beginning of ventricular systole. 9, Beginning of a, c and v waves for measuring the entire duration of the cardiac cycle (a-v) and the ventricular cycle (c-v), rest period (v to second a).

their distance apart horizontally along the tracing. The next step is to determine on the radial tracing the exact point at which the ventricular contraction begins. This may be arbitrarily determined by marking a point $1/10$ th of a second before the beginning of the upstroke of the radial tracing (6). This is the beginning of the ventricular systole, which does not vary much in health or disease. It simply represents the time which it takes for the blood to travel from the heart to the radial pulse. A vertical line is drawn from this point to a point about midway between the radial and venous tracings. From this point a horizontal line is drawn in one direction or the other, exactly equal in length to the difference between the two ordinates above described (7). From this point a vertical line is drawn down through the venogram (8) and this will be found to exactly intersect the latter at the beginning of the c wave, which is produced at the instant of the ventricular contraction by back pressure in the jugular vein. We now have two cardinal points, one each in the arteriogram and venogram. The next step is to measure backward $1/5$ th of a second from the c wave, draw another vertical line through the venogram, which should, in health, approximately intersect the beginning of the auricular wave. These three points are the only essential ones in the rapid clinical study of the polygram, which can be done in five minutes. It gives us the beginning of the auricular contraction and the beginning of the ventricular contraction, the difference in time between which may thus be readily determined with a pair of callipers, and which represents the conduction time from the auricle to the ventricle.

which should not exceed $1/5$ th of a second except in disease of the conducting system. The end of the ventricular systole is indicated by the dicrotic notch on the arteriogram and the negative or depressed v wave on the venogram, the only value of which would be to determine the exact length of the ventricular systole, which is not usually very important, although it is sometimes greatly lengthened, especially in digitalis medication and may, therefore, sometimes be of clinical interest. This is indicated in Fig. 1 from c to v just above the line (9), while a to v at the same point represents the entire cardiac cycle and v to a the rest period of the heart.

The beginning of each wave is the point from which and to which measurements are made. One very valuable feature of the polygraph is that a tracing of the heart can be made over a considerable period of time, thus enabling one to detect slight occasional rhythmical aberrations. The first original polygram that I ever saw was exhibited by James Mackenzie, at the Toronto session of the British Medical Association, and was perhaps 10 or 15 feet long.

A brief description of the normal clinical findings with the electrocardiograph, in addition to the outline already given in the historical sketch, will here be presented. In Fig. 2 is given a

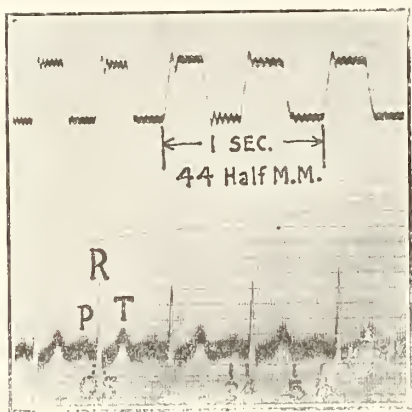


FIGURE 2—Electrocardiogram: LEAD 1
D Case, 4th Series No.

P, auricular wave. Q, inconstant wave, beginning of ventricular complex. R, main ventricular wave. S, inconstant wave. T wave, close of ventricular complex. 1, time marker. 2, electrocardiogram. 3, beginning of P wave. 4, beginning of R wave. 5, end of T wave and end of ventricular complex. 6, beginning of next P wave. (3 to 4), P-R interval—1-7th second. 5 is end of ventricular systole and also end of cardiac cycle. 3-5 indicates complete cardiac cycle. 4-5, complete ventricular complex. 6, beginning of next P wave. 5 to 6 rest period of the heart. The character of the different waves is about average normal in this tracing.

practically normal electrocardiogram from a case of chronic myocarditis. The orderly arrangement of the graphic records of the cardiac events in a single line, one after the other with minute accuracy as to time, instead of two tracings which have to be synchronized afterwards with the polygram, is perhaps the most striking difference. Owing to the extreme sensitiveness

of the galvanometer string, the movements of which can be measured to the one-hundredth of a second, the duration and time incidence of the cardiac events, can be studied with great accuracy. The upper angular tracing in Fig. 2 is the time marker, each complete cycle of which represents one-half of a second. My own method is to measure two cycles, or one second, with a $1/2$ millimeter rule. With the speed ordinarily used, one second is usually about 42 half millimeters, each half mm. therefore representing $1/42$ d of a second. With another speed for cases of tachycardia, each half mm. represents about the one-eighty-fifth of a second. By measuring with a pair of callipers the distance between any two points on the tracing and transferring the callipers to the half mm. rule, the distance can be recorded with absolute accuracy in $1/42$ d of $1/85$ th of a second.

The wave P is produced by the auricle, while Q, R, S, and T, are due to the ventricular contractions, and are called the "ventricular complex". R and T are the only constant waves. The form, amplitude, time incidence and directions of these waves are the important data. Any one of these waves may be reversed or negative in direction, i. e., may point downward instead of upward. Dr. Willins, of the Mayo clinic, has shown from the study of a large number of cases that reversal of the T wave is a very sinister prognostic sign.

Perhaps the most important single point is the duration of the P-R interval or the beginning of the P to the beginning of the R wave, which represents the conduction time from the auricle to the ventricle. As stated in discussing the polygram, this should not exceed $1/5$ th of a second. I frequently find it $1/6$ th of a second or less.

As already stated, these graphic records are not required in every case of heart disease, but Thomas Lewis, the greatest exponent of electrocardiography, says that there are very few cases that would not be clarified by an electrocardiogram. No attempt is made to introduce illustrative abnormal polygrams or electrocardiograms. This, if comprehensive, would require a small volume.

TREATMENT

Space will permit only a few general remarks on treatment. The treatment of heart disease is for the most part the treatment of the patient who owns the heart. This means that all extra-cardiac pathology should receive due attention; and especially that all infections, focal or general, whatever their nature, should be recognized and if possible removed; and that nutrition, metabolism, elimination and general hygiene should be maintained if possible at their optimum standards. Rest and digitalis have been a therapeutic obsession. Both are indispensable in a large proportion of cases. Their indiscriminate use has done much harm. *Graduated rest*

and exercise is the ideal thing. The partially disabled heart muscle can no more reach its highest degree of functional efficiency without the stimulation of appropriate exercise than can the biceps.

The digitalis group stands in a specific relationship to the heart and vaso-motor mechanism, and because of this very fact, its use demands the keenest therapeutic discrimination. The routine exhibition of digitalis, just because the patient has heart disease, is utterly reprehensible.

There are two main indications for digitalis: viz. (1) actual myocardial weakness from whatever cause, and especially if associated with rapid heart action and low blood pressure; and, (2) an ectopic rhythm which has subverted the sino auricular rhythm by causing so frequent irregular contractions that the heart muscle is apt to be in the "refractory state" when the normal impulse is delivered, e. g., auricular fibrillation. In the first instance, it has a specific stimulating and strengthening effect on the asthenic myocardium; in the other case, by lowering the conduction time of the abnormal impulses, it renders most of them abortive, and, in whole or in part, places the sino auricular node in "command". This is probably the most brilliant achievement in the history of cardiac therapeutics.

When digitalis is really indicated, its dosage has been largely misunderstood and has for the most part been much too small. Fifteen to thirty minims or even much more, of the standardized tincture or its equivalent at rather long intervals, say 18 to 24 hours, giving rise to intermittent stimulation, seems to give the best result. In cases requiring long continued medication, it should be given several days and then intermitted for a few days.

Perhaps nothing requires more discriminating clinical judgment than the digitalis medication of the heart. The dosage above indicated may often prove too high and there are certain contra-indications, especially to the full dosage above indicated, which cannot here be considered as this paper is already too long.

OCCIPUT POSTERIOR.*

A. M. MENDENHALL, M.D.

INDIANAPOLIS, INDIANA

A vast amount of literature has accumulated on the subject of occiput posterior, and many good authorities differ as to methods of handling this condition. Probably the fact that so many obstetricians have come forth with a strong plea in behalf of one single procedure is the chief reason why many practitioners lose

sight of the fact that there are many different procedures to be kept constantly in mind when in attendance upon a case of posterior position of the occiput.

As in internal medicine we have come to know that when many different drugs are advocated for a single given disease, it is pretty certain that no one of them is quite satisfactory; so in this obstetrical complication, there being so many different methods advocated as to treatment, it is equally certain that no one of them is universally the best. Therefore, there will be no attempt in this essay to say that any particular method is to be adopted in all cases; but rather, that the advantages and disadvantages of each method be carefully considered as applied to each particular case.

The reasons why an occiput posterior position is relatively more difficult than anterior position is elementary obstetrics with which most all physicians are familiar. We have learned from practical experience if not otherwise that even though a high percentage of occiput posterior cases eventually rotate and deliver as anterior positions, yet this process of rotation as a rule means a very much prolonged and more difficult labor. Then that smaller percentage of cases which fails to rotate or rotates to the hollow of the sacrum, offers a well recognized mechanical difficulty in that the fronto-occipital diameter of the baby's head rather than the suboccipito-bregmatic diameter is presenting in antero-posterior diameter of the mother's pelvis. There being at least two centimeters difference on the average between these two fetal head measurements, we are confronted with the necessity of maternal measurements that much greater. Then, if delivered as persistent occiput posterior, the perineum is placed upon a very much increased strain as it must stretch circumferentially to about 4 or 6 centimeters greater distance, all of which means risk to mother and baby.

In order that each case of occiput posterior may be given the best possible chances to rotate, it is important that an early diagnosis of position be made, for as soon as we know we are dealing with an occiput posterior we can institute at least postural treatment and also let our examinations be made with a view of not rupturing the membranes. The writer has nothing new as an aid in making this diagnosis, but there is no doubt that if the well known examinations be routinely carried out in every case we will not so often discover late in labor that the occiput is posterior.

There is no single diagnostic sign except perhaps a positive palpation of the fontanelles and sutures per vaginam, or more rarely per rectum, but there are other strongly suggestive points to be looked for. In palpating the abdomen the baby's back can usually be felt on the mother's

(*) Presented before the Section on Surgery of the Indiana State Medical Association at the Muncie session, September, 1922.

right and often far over to the right. Likewise the fetal heart is often far over to the mother's right. Then we are often able to palpate the head from above the pubis distinctly enough to give us quite a strong conviction as to its position. Add to these facts the fact that when the baby's back is to the mother's right, we have the statistics to show that it is very probable that the position is one of right occiput posterior, and it is evident we will be able to quite accurately make the diagnosis early. Nevertheless it is not unusual at all to find men sending their patients to hospitals or sending for consultants and even employing forceps without having put forth much effort toward a diagnosis of the cause of the dystocia.

The application of forceps in a case of occiput posterior may sometimes be indicated but there is very rarely any excuse for not at least knowing that it is a posterior presentation. I am sure I am safe in assuming that no one is now attempting to apply forceps except with the patient anaesthetized, and after the patient is anaesthetized, if one is in doubt as to the position of the occiput he should by all means insert his fingers into the vagina high enough, and if necessary all four fingers, in order to palpate one of the baby's ears and then all doubt as to position can be cast aside and forceps applied intelligently if at all.

Assuming that a diagnosis of occiput posterior position has been made, what is to be the treatment? First of all this will of course depend very much upon how early in the labor the diagnosis is made. Postural treatment may always be applied as it is quite harmless and not even uncomfortable. Practically every textbook or treatise on obstetrics published in a number of years mentions the fact that to place the mother on her side toward which the baby's back is directed favors flexion and rotation of the head, and yet how often is this single procedure even tried? There is ample evidence to prove that a much higher percentage of cases will spontaneously rotate anteriorly just by placing each case in this position alone.

This leads logically to the next point I wish to emphasize in treatment—namely, allow plenty of time. As a rule the cervix dilates slowly in these cases and very often the membranes rupture early; then when anterior rotation of the occiput is taking place it is quite according to rule for the process of rotation to consume considerable time so that when all these delays are considered we find that occiput posterior labors are slow, whether they rotate or continue as persistent posterior deliveries. Therefore this fact must be constantly borne in mind, or the obstetrician may be led into unnecessary and even hazardous interference in cases where spontaneous labors would have occurred with greater safety to mother and child.

In case one decides upon an attempt to aid rotation there are several methods which might be mentioned such as the vectis or one blade of the obstetric forceps but there is a manual method which is more safe and more often effectual. I refer to the method of inserting the two fingers into the vagina and behind the occiput and attempting to rotate the occiput anteriorly, at the same time aiding in this maneuver by pressure with the fingers of the other hand on the brow or chin through the mother's abdomen above the pubis. Neither of these maneuvers alone are often successful, but by combining the two, and by having enough patience to persist in the effort until a few uterine contractions have taken place, one is quite often rewarded by the occiput remaining anterior and by prompt delivery thereafter.

The next method to be mentioned is the insertion of the whole hand into the vagina, and by grasping the head in the hand, simply twisting it around to proper position. This is very easy of execution but as soon as the hand is withdrawn from the vagina the head very nearly always drops back into the same original posterior position. Obstetricians in general are agreed that they rarely are able to get the occiput to stay anterior long enough to apply forceps and for that reason they rarely try it. In the writer's experience it has been almost universally unsatisfactory. And the very fact that it has been so universally unsatisfactory with DeLee, has led him to suggest and try a new method which I shall describe briefly.

Dr. DeLee passes one hand into the vagina and rotates the occiput as described above. Then while this hand is still grasping the child's head, he passes a heavy double vulsellum into the vagina and grasps the baby's scalp. As he withdraws the vaginal hand he maintains firm enough traction on the vulsellum to hold the head snugly in the pelvis and prevent it from again rotating posteriorly. Then with an assistant maintaining this traction he applies forceps and pulls the head down into a position where it is not in further danger of rotating posteriorly, and leaves labor to continue spontaneously, or completes the delivery with the forceps, as his judgment directs at the time. I shall not pass judgment upon this procedure except to say that it seems quite formidable and has not been accepted by the obstetrical profession. When it is demonstrated to be safe to puncture the baby's scalp in this manner and to make the traction upon it which is required, and when demonstrated to be effectual in at least a high percentage of cases, it may become a method of choice but at present it should be held *sub judice*.

The Scanzoni maneuver which has been resorted to at times by different operators is

another rather formidable procedure and certainly is not to be attempted by any one other than a skilled obstetrician and forceps manipulator. This consists in the application of the forceps in the usual way and then by gradual traction and a very careful twisting motion swinging the handles of the forceps through a 135 degree arc of a rather large circle, one is often able to rotate the occiput to the anterior. Then the forceps will be upside down and must be removed and reapplied in proper position before further efforts at delivery are made. This operation entails great risk of injury to the maternal soft parts and these injuries are often of a nature which renders them quite difficult of thorough repair. Likewise there is great danger of injuring the baby and it should be an absolute criterion that unless rotation takes place comparatively easily it had better be discontinued and some other method chosen.

Cesarean section as a method of delivering these cases needs mentioning only to say that this position alone is by no means an indication for cesarean section, and that unless there is definite disproportion between the pelvis and the child there are other and better procedures.

Lastly in dealing with occiput posterior position, should be mentioned internal podalic version. Medical literature abounds with references to this procedure as a method of delivery, but few obstetricians other than Potter, of Buffalo, have advocated it in each case. Version of course is an operation not to be undertaken by one other than a skilled obstetrician except at least in serious emergencies. Nevertheless *it does* offer a valuable addition to our armamentarium in caring for these cases. A very large number of occiput posterior cases should unquestionably be treated by version when it is found that the membranes are intact or have not been ruptured too long, and when the cervix is fully dilated or easily dilatable. We all know of course that several cases like this would eventually rotate and be delivered spontaneously if left alone, but one of the great differences between the old time midwife and the present day scientific obstetrician is that the latter is constantly and alertly cognizant of what is taking place in each case of labor and is ready and able to render assistance before conditions are such as to render this assistance more hazardous. In other words, to quote Potter but not to support him in his belief in the routine delivery by version, "It is quite certain that many deep transverse arrest cases can be avoided by a timely resort to version."

It is common knowledge that these posterior cases tend to rotate partially, and partial extension of the head takes place, that uterine inertia begins as a result of the long hard labor, and that we are confronted with the head in mid pelvis or a little lower, and the sagittal suture

running parallel to the transverse pelvic diameter,—or, as spoken of in our text book, it is in a position of deep transverse arrest. In this position it is difficult and hazardous to apply forceps; it is difficult to rotate the head by any method; and, according to most authorities, excepting possibly Potter, it is difficult and dangerous to do version. In view then, of the fact that so many cases reach this undesirable stage, it would seem wise to step in and do a version in at least a large number of these cases before there have developed so many contraindications.

In my own practice I am thankful to Potter for his demonstrating the comparative safety in a skillfully performed version, so that I have extended the indication for this operative delivery to cover a great many of my own occiput posterior cases as well as many cases where I am called in consultation. Within the past few weeks I have been called to see four cases of occiput posterior, three in St. Vincent's Hospital and one in the Methodist Hospital in Indianapolis, and in each case the patient had been in the delivery room for hours and attempts had been made to effect the deliveries by means of forceps and each had resulted in failure. In one of these cases I made a very short and careful attempt to do a Scanzoni forceps delivery but finding that it was going to require considerable force to accomplish this I abandoned it and did an easy version. In the other three cases I decided at once upon examination that I would not attempt any kind of forceps delivery but would perform versions. One of these cases proved somewhat difficult as there was a moderately contracted pelvis and a two week's post-mature baby, but in all three cases the version was completed satisfactorily without serious injury to mothers or babies. In my own cases I very rarely resort to version so late in labor but in consultation practice and charity practice I am often confronted with little other choice.

SUMMARY

1. Early diagnosis will greatly extend our ability to get these occiput posterior cases to rotate.

2. Every possible effort should be made to arrive at a diagnosis of the position before there is any attempt to deliver with forceps.

3. It is right and proper for the average man practicing obstetrics to give all these cases plenty of time before operative interference.

4. The postural treatment and the combined vaginal and supra-pubic manipulative treatment are quite safe and often effectual.

5. Operative treatment, such as DeLee now recommends, internal podalic version, Scanzoni's method, or in fact any forceps method, in cases of occiput posterior require of the obstetrician considerable experience and skill if the welfare of the mother and baby are to be properly safeguarded.

DISCUSSION

DR. CLAY BALL (Muncie): The most important thing about this subject, perhaps, is an early, correct diagnosis of the condition. The cause of most of our troubles, I believe, has been our inability to recognize the fact that we were dealing with an occiput posterior. This failure has been due to both deficient early training in obstetrics, and failure to use the knowledge we possess. The following points should put us on our guard that we are dealing with an occiput posterior, namely, a long first stage of labor, early rupture of the membranes, weak and ineffective pains, slow thinning out of the cervix and slow dilatation of the cervix, a distinct hollow above the pubis, noted especially in thin women: back to right, and fetal heart sounds best heard on right side, and shoulder not in front as usual. If in doubt, careful vaginal examination should be made, palpating the sutures and fontanelles, if possible. This is often difficult, but as a last resort there is one infallible sign—the palpation of the ear.

As for the management of these cases, speaking from the standpoint of a general practitioner, I believe conservative management is best. The highly trained obstetric specialist may take liberties which we had better leave alone. I am convinced that if left alone the vast majority of occiput posteriors rotate and do so without harm to either mother or child. Doctor Mendenhall spoke of one safe and easy procedure which has been successful in his hands in those cases that do not rotate, or rotate so slowly as to endanger the life of the baby, namely, inserting two fingers behind the occiput, with the other hand above the pubis, waiting for two or three contractions and attempting to lift or turn the head into the position of occiput anterior. He spoke of the success of this method and the almost universal failure when the whole hand in the vagina is used to turn the head. I am wondering if the former cases would not have rotated any way, if left alone, and if the latter class does not represent our cases of persistent or stubborn occiput posterior. I would appreciate it if he would make this clear.

Conservative management is the best for those of us with limited training in obstetrics. I believe we should make as few vaginal examinations as possible, and in those cases presenting special difficulties, make use of special obstetrical training. Surely these cases are just as difficult as major surgical cases and certainly the lives and health of our mothers and babies demand that we give them the best.

DR. G. B. JACKSON (Indianapolis): Doctor Mendenhall has presented this subject in a very creditable manner, in fact, I may confess in a more creditable manner than I had expected. I came prepared to hear him advocate the rather general use of version in obstetrics, particularly

in these cases. That was, as I understood from the Doctor's remarks a little while back, his attitude. But the literature of late is full of this subject, and I think most of us are converted from such a radical attitude.

In the first place, breech cases—cases in which Nature has done the version—are not without their drawbacks in a practical way, not without danger, not without high mortality; but in the discussion we have not time to go into that. I have just recently seen two cases of brain injury in breech cases, one a version and the other a normal breech case, so that danger to the child is no less than with the vertex presentation.

So far as occiput posterior cases are concerned, we all know that with early, careful examination we find a relatively large number of occiput posterior positions. Negele called attention to that many years ago and it is a rather constant observation. I have just recently delivered three successful occiput posterior cases in the Methodist Hospital, all three rotating. One other—a little while before—I had to rotate or "convert." But most of them, if we have a little patience, will rotate anteriorly. Those cases that do not rotate should be taken care of, and Doctor Mendenhall has brought that out in an excellent way.

So far as Scanzoni's method is concerned, I was taught eighteen or twenty years ago that Scanzoni's method was only mentioned to be condemned, and I have never seen any reason to modify that view of such a method. I do not think it should be mentioned in the text-books; I think it is too dangerous to be even considered.

As to the DeLee method, I do not want to make such a radical statement, for obvious reasons; but the method appeals to me as one which carries with it considerable danger to the child—practically none to the mother—and I do not believe it is at all effective. If you can hold the head in place with a vulsellum on the scalp, you can hold it with pressure. I happen to have seen such a case delivered by Doctor DeLee personally, in which the child presented a most terrible picture of hemorrhage and sepsis, and died from injury to the scalp by the vulsellum.

As to the theory of slow dilatation of the cervix being causative of this position, I am hardly ready to accept that as plausible. We see these cases in primipara, and we know that in primipara the head is engaged before labor starts. Therefore I rather question the idea of the closing of the cervix having anything to do with causing this position. Most of them rotate after the cervix is dilated.

DR. HOMER WOOLERY (Bloomington): The great thing in obstetrics is "watchful waiting" and being prepared to do what is indicated at the time. Of course the first thing is always a

clear diagnosis. I think sometimes the obstetricians, or rather the practitioners, are afraid to make the necessary examination; they make it too superficially to be sure of their diagnosis.

I am glad the Doctor brought out the point that before anything radical is done, like putting on forceps in the posterior position, the patient should be put under an anaesthetic and a true diagnosis made. We see so many cases where the doctor goes ahead without knowing what he is doing, with such terrible results to mother and baby. Of course, given a case of persistent occiput posterior, if one is skilled in version as Potter, there is no question what should be done. But a Scanzoni, as Doctor Jackson has well said, should be condemned and should not be in our literature. A person like DeLee might do a Scanzoni perfectly, but for someone else who is not skilled to try it is dangerous to the patients, both mother and baby.

The important thing is to be sure of our ground, both as to diagnosis and as to our ability and technique in handling the case in the manner indicated.

DR. CHARLES J. ROTHSCHILD (Fort Wayne): In these cases of posterior position one of the very essential things, as has been mentioned, is diagnosis, and one of the greatest helps in that direction is careful measurement of the pelvis. So often we find a somewhat flattened pelvis, which will be suggestive in determining this position. Very often in thin women a simple glance at the abdomen after completing a careful examination will show you a hollow just above the mons veneris, and this, together with the other findings, is suggestive of occiput posterior. A posterior position complicated with dry labor is one of the most disagreeable things one can run into, especially in a primipara, and anything that will help to dilate the cervix will often facilitate rotation. The metreurynter in these cases is valuable.

I would like to take this opportunity to make a radical statement—to heartily condemn the ordinary use of forceps. I personally feel that they are the most dangerous instrument in the obstetrical armamentarium. They are so often used by men who do not know how to use them, and the woman is hopelessly crippled the rest of her days. With a lessened use of forceps I think results will be much better.

One cannot altogether depend upon the position of the fontanelles, but it is essential to know where the ear is located in making a vaginal diagnosis.

At this time I think version in primiparae is something that should be taken *cum grano salis*, but version in multiparae is not so dangerous.

DR. HERBERT D. FAIR (Muncie): I think one of Doctor Mendenhall's statements should be modified, with reference to the method recommended by Dr. W. H. Potter twenty years

ago, that is, the insertion of the whole hand. If no attention is paid to bodily rotation while the head is being turned, of course the head will go back as soon as the hand is withdrawn. I have my assistant turn the body, while I manipulate the head, and he holds it in this position until several contractions have occurred and there is no reason why it should not stay put.

I have been using this method successfully for years, and do not hesitate to recommend it.

DR. A. M. MENDENHALL (closing): Obstetricians all over the country are trying to find out what to do in these cases of occiput posterior; but the cases must be individualized and you must do what seems best in the given case.

I agree with Doctor Ball as to conservatism. These occiput posterior cases comprise about 20 to 30 per cent., and out of this only 3 per cent. will fail to rotate if you leave them alone. Therefore if anyone has not the skill to do a version, a Scanzoni, or a DeLee operation, he had better go play golf and let the woman alone.

You will be tremendously interested in reading Doctor Polak's recent paper on "Handling the Undilated Cervix." You have a terrific handicap with an occiput posterior when the cervix will not dilate. He places before the American obstetricians a method of handling the cervix in these cases.

Doctor Ball asks why, if we can rotate the head with the hand so easily, we do not simply wait for the head to rotate. I emphasized that it is necessary to continue this for some time and let the woman have several pains. She is not under an anaesthetic. But you must persist in it. The average man cannot do that. In a hospital you have the interne and the nurse to help you. It takes time to drive the head down into position where it will not return.

THYROID DISEASE*

DR. A. C. ROOPE

COLUMBUS

This paper was written with the intention of reading it to one of the smaller societies, made up almost entirely of men whose chief interest is internal medicine. I presume to offer it to such a gathering of surgeons as this after hearing a most excellent paper on the subject in this city a short time ago. This paper, however, was entirely surgical in its presentation. There are also new books by leaders of thyroid surgery but recently off the press, and the keynote of all is this quotation from one of them, "We advise surgical treatment for all cases without regard to the degree of hyperthyroidism." This assumes a finality, and finality of conclusion on the subject has not been reached, nor will it be

(*) Presented before the Section on Surgery of the Indiana State Medical Association at the Muncie Session, September, 1922.

until the inter-dependence of the various glands of the endocrine system in their relation to normal health and vitality is better understood. While this knowledge is in process of formulation it remains the duty of each one, after having acquainted himself with the opinions of others, to do his own thinking—taking into consideration such local and environmental conditions as may affect the individual case—remembering that the best application of surgical knowledge is the prevention of surgery which carries grave danger when such surgery does not offer more than other treatment not attended by such danger. I believe the surgeon is in a better position than the internist to act as educator on this subject, and the following pages, devoid of technical operative detail, are given in elaboration of this thought. Pathology is lightly reviewed, because to most of us pathology becomes easily lost in obscurities of memory.

There is probably no other class of very prevalent diseases which in its early stages of harmful activity is so neglected or is so enveloped in obscurity to both the physician and the patient, and in which the patient is so little able to help clear away the fog, or when the fog is cleared is less willing to help make the management of the case such as to bring a happy outcome.

That goitre is a neglected and very common disease the following will illustrate: Standing in the lobby of a theatre one evening I counted two hundred women passing (those wearing high collars not included in the count), and of the two hundred, sixty-five had visible enlargement of the thyroid gland. No doubt at some time nearly all of them had consulted their family physician about their necks; many of them had been told that the goitre was of no consequence, that it was not a goitre, or that it was a harmless goitre and to forget it—and had been satisfied. As a matter of fact every one of these cases was entitled to serious consideration, for it is probable that at least fifty per cent of them at sometime develop symptoms which again send them to the doctor—often with a complexity of ills baffling to the most careful.

There is no harmless or safe goitre except in a relative sense. The nearest to such is the large colloid goitre, pathologically a distinct type—a reversion toward the normal thyroid after having undergone hypertrophy or hyperplasia, or both, the colloid and iodine contents increase and there is a change in the epithelial cells. It is a step toward cure of an otherwise progressively active process. In size it grows away from the normal. It is clinically often symptomless except for its size and mechanical inconvenience in causing pressure. The fact

that it is unsightly is usually the greatest concern to the patient. It often undergoes spontaneous recession, is often benefited by iodine applications, or one of the many advertised nostrums, which in other forms of goitre are so often responsible for disaster. It is usually lessened in size by proper x-ray treatment, and it is borne through life by some with apparently no harm, but it is always a potential danger because, though its deviations from normal are slight, it is more susceptible than normal tissue to infection of so-called focal origin. Having no demonstrated lymphatic connection with the teeth, the tonsils or the nasal sinuses, clinical evidence upholds the theory that it nevertheless is often affected by their diseases, probably by blood stream infection and through the selective action of the micro-organism of the mouth and nose, for tissue of lessened vitality. Once becoming so infected, the gland itself becomes a distributor of specific bacteria or their toxic products, the local irritation caused by the infection stimulates the development of thyroxin retaining alveoli, with the ultimate systemic phenomena of hyperthyroidism plus active pyogenic infection—a true mixed thyrotoxicosis. The same with some differences, due to the differences in structure and the fact that it less seldom remains quiescent, may be said of simple goitre in the adult. Hence in the treatment of these goitres, one of the first steps should be to see that the mouth, the nose and throat are normally clean; often then you find that the original focal infection has developed a focus of infection more evil than its parent, and radical thyroid surgery is the treatment of necessity.

The thyroid enlargement of pregnancy is physiological and calls for no treatment when not persistent or not supplementing a pre-existing goitre which may be activated at this time.

I will mention malignant disease only to state that its treatment, like that of malignant disease anywhere, is early and radical removal—theoretically, practically this removal is possible only where the seat of the disease is encapsulated, a cyst unbroken or an easily accessible adenoma—for why remove the thyroid gland with its parathyroids completely, and substitute a condition in no wise better than the disease for which the operation is done.

The thyroid enlargement of the adolescent is a simple goitre—it is first an hypertrophy. The gland becomes softer, there is an increase in vascularity, a variability in the size of the follicles, the iodine and colloid contents diminish—subject to waves of recession and enlargement, and manifests itself most frequently at the time of or soon after puberty—oftener in girls than boys, except where distinctly endemic,

in which case there is no sex incidence. Occurs coincidentally with the period of most rapid development of sex characteristics. It is mostly physiological, but is often an index of the intensity of emotional stress, which this development entails and it merits the tenderest and most thoughtful care. The patient should not be lightly dismissed. In addition to clearing up focal infection, the treatment is the guidance of youth to the care of the body and the care of the mind, exercise and study, hygiene, good food—with plenty of roughage and a scarcity of condiments, vegetables seasoned in part at least with sea salt, if that is possible, raw fruit and milk, long hours of sleep, cleanliness of body and cleanliness of mind, with interrupted short courses of iodide of sodium and small doses of thyroid extract, if this does not increase the pulse rate or cause loss of weight. Most of these goitres will have disappeared by the age of twenty or twenty-two. To remove the thyroid at this time simply because it is large and the patient is willing is a crime. These statements are not to be construed to mean that disease of the thyroid, which places it in another class, never occurs at this age.

The later years, particularly of adolescent goitre, mark the activation of adenomata of the thyroid. The differential diagnosis, however, is usually not hard, except in the diffuse colloid adenomatous goitre, or the adenomatosis of Goetch, the existence of which as an entity is still in doubt; the adenoma, or the small cysts, may be unilateral, usually are palpable or even plainly visible, and they do not disappear as the simple goitre does, though in some cases they are not discovered because not searched for; but adenomatous goitre of the foetal type when very active becomes one of the most dangerous forms of thyroid disease. These little foetal rests, whatever the cause of their activity, seem to become direct irritants and induce a true hyperplasia of surrounding tissue and themselves eventually become histologically identical with the thyroid substance, and particularly liable to malignant change, besides being subject to all the ills of adenomata of other parts of the body, particularly of those implanted congenitally in foreign soil; and it is probable that all of these adenomatous goitres sooner or later become toxic, though extreme toxicity is rare under the age of thirty. The treatment is surgical.

Diffuse adenomatous goitre is always bilateral enlargement of the thyroid lobes—in its individual nodules having completely lost the lobulations of the normal thyroid. It probably marks a change in a long standing colloid goitre; it does not become malignant, but is subject to toxic invasion.

Exophthalmic goitre, Graves' disease. Base-

dow's disease—pathologically a hyperplasia of the thyroid, a continuation of the exciting causes of simple hypertrophy, produce in time a proliferation of epithelium in the follicles, the formation of new follicles with plication and papillary projections of the wall into the lumen of the follicles. An actual increase in active thyroid tissue which because of its infoldings and plications may not be attended by a corresponding augmentation of the outside measurements of the gland—the "inward" goitre of the laity. It is familiar to you all when in its late or very active stages; the exophthalmia, the tremor, the tachycardia, the gastric crisis, the dilatation of the heart and hepatic and renal degeneration with accumulation of tissue waste and consequent H. ion over-balance and profound acidosis. It develops in fairly definite stages as regards to time—about nine months of gradually increasing nervous symptoms being usual before the crisis is reached with the patient more or less completely prostrated. If he lives through this, which he frequently does not, to gradual lessening of symptoms, he runs along with lighter exacerbations and remissions for about two years when there is a second crisis, not so violent as the first, but leaving on its subsidence a more seriously damaged heart. Ups and downs of thyroid toxemia mark the course of the next several years when gradually the toxic symptoms may disappear. The thyroid becomes smaller and the exophthalmic goitre is well, but the patient is a wreck of cardiac, renal and hepatic degeneration. While waiting for this spontaneous cure many of the patients will have died and some of the remaining ones will have gone insane. Violent hyperthyroidism occurring at the menopause is particularly liable to terminate in permanent mental impairment.

In the eight or nine months period before the initial fulmination of an exophthalmic goitre there has been a time in many of the cases when a careful diagnosis, with proper treatment would have saved the patient much. Sometimes this reflects little credit upon us, sometimes it is not our fault because these hyperthyroid patients are prone to deceive—more than almost any other class. They tell you they are better when they know they are worse; that they are worse when they know they are better—and from the first they resent and resist the prescription of "rest," mental and physical, which is the one great essential to successful treatment. One could write much on the subject and still leave without light many of the early and the borderline cases.

I wish to call attention to some points which the people should know.

The size of the goitre bears no direct ratio to the violence of the symptoms.

The careful clinician need seldom be at a loss for lack of laboratory aid in diagnosis or hyperthyroidism. The basal metabolic rate, of which much has been written into the subject, has its chief value as an aid in differentiating borderline cases and as a slight index to operative safety. If not available just remember that a good appetite and loss of flesh seldom go together (in ambulant cases) except in hyperthyroidism and diabetes. The Goetsch test is of little value, possibly a slight aid in the differentiation of hyperthyroidism and early T. B.

Goitre is a nutritional deficiency disease with iodine the lacking element of food. It occurs endemically, but is much more common inland than on the coast, the thyroid gland of the sea coast dweller being normally only about three-fifths the size of that of the mountaineer. Iodine is consistently present in sea water and in the animal and vegetable life of the sea and as consistently absent in that of the land.

It is in a large degree preventable. If iodine in some form is supplied to the growing child, the occurrence of simple and foetal adenomatous goitre will be materially lessened in the adult. With this knowledge its abridgement becomes one of the duties of this generation to the next. But remember that once the toxic goitrous condition is established, iodine is to be used only with extreme caution, as its action is often the opposite of that desired, for in hyperthyroidism the thyroid has lost its ability to retain thyroxin-thyro-iodin, and dispense it in proper dosage, or—and this must often be the case—the individual has lost his ability to transform the raw material into a form of iodine which can be used by the thyroid. This brings us to the subject of prevention—great as has been the work of Marine it is not so absolute in its results as it first promised to be—it too often comes too late—the treatment should start with the mother. Eliminating the physiological enlargement, all pregnant women having abnormal thyroids should receive treatment, for defective thyroid function is almost certain to pass on to the child, either as a physical or a physiological defect, or both.

In Conclusion. Leaving out acute pyogenic infections of the thyroid and tumors—malignant and benign—and accepting the attempted merging of clinical classification into the one term "Hyperthyroidism"—should all cases be treated surgically? I do not think so; the thyroid cannot be compared to the appendix—a vestigial body of no importance except as a trouble maker. Each case is an individual case—one will require surgery, another will get well better without it. All of us concede that surgery offers more than any single form of treatment at the present time—that, however, is no excuse for

eliminating all other considerations in our study of a case.

I am as certain that I have seen cures affected by x-ray treatment as I have by thyroidectomy. We have all seen cure of goitre with symptoms follow pelvic operations, particularly the removal of uterine fibroids, and we have seen apparently complete cure of fairly long standing and vicious hyperthyroidism follow marriage of women under thirty. We simply do not know enough about the subject yet to select our cases, hence we operate when often we should pause.

Really I am convinced that no matter what the present form of treatment, our so-called cures, once the patient has been very sick, are only relative approaches to the normal.

DISCUSSION

DR. F. H. JETT (Terre Haute): I was very much interested in the discussion this morning because the word "goiter" was not mentioned. We are all talking about the same thing, there is no discussion between internists and surgeons, but we are including all these things together—goiter, tumors, misdirected function, thyroiditis. All these things were included in the discussion of enlargement of the thyroid. The treatment cannot be the same for all. There are plenty of enlarged thyroids in syphilis, and in all infections where the endocrine balance is thrown out of line, but we would be crazy to treat them for anything but their infection.

You have some very definite things in thyroid disease. I think Basedow's disease is a clinical entity, an acute disease, perhaps a form of thyroiditis, and has a definite pathology. To consider all diseases of the thyroid at one time under the term "goiter" forbids conclusions.

At this time all toxic thyroids and mechanical thyroids are surgical. Of course, infections should be carefully excluded and the degree of toxicity based on the metabolic rate. These thyroids are just as truly surgical at this time as appendix or gall bladder disease—are more truly surgical than duodenal ulcer—and the results are more favorable. When the men who see these cases early are convinced that toxic and mechanical goiter are surgical and the cases come to early operation, the result will be nearly ideal except for the mortality that goes with all major surgical procedures.

X-ray holds some hope, but should be considered at this time as experimental and should only be used as such.

These are not the only thyroid enlargements that are surgical, but I think it would be well to settle the point that these two are. To my mind the time has come when goiter should be

split up into its different forms so that conclusions and treatment may be arrived at, for treatment after all is the one thing in which both we and our patients are interested.

DR. M. E. KLINGLER (Garrett): I was a little surprised that nothing was said about the measurement of the toxicity of goiter by the metabolism outfit. It is surely recognized these days that it is rather essential to know something about how toxic a goiter is before we know what we should do.

It has been our policy for some time to measure the activity of goiters by the use of the metabolism outfit, before and after treatment of various kinds, and we have found to our surprise why patients die following goiter operation. The metabolism that before operation is increased 20 to 25 per cent. will be increased 60 to 75 per cent. in three or four days after a very carefully prepared patient has been very carefully operated. In spite of all the preliminary care, and care in operation, you still have a dangerous increase of metabolism after operation.

Another thing we have learned is that deep mass x-ray therapy will treat these toxic cases very satisfactorily, for a time at least, and before we operate on a case that has a metabolic rate of over 50 per cent., it is always subjected to this treatment. It is remarkable how quickly a mass dose of x-ray will reduce the metabolism. We are treating a large number of cases with the x-ray. I do not know how permanent the results will be, but I take it they are reasonably permanent, judging from the statistics at present available.

FRACTURE HAZARDS*

REPORTING THREE UNCOMMON FRACTURE CASES,
WITH THE USE OF AN ORIGINAL CRUCIFIXION
SPLINT IN FRACTURE OF THE SURGICAL
NECK OF THE HUMERUS

M. A. AUSTIN, M.D.

ANDERSON, INDIANA

The care of fractures is probably the least appreciated of any of the surgeon's work. If a good result is obtained it is what the family expected, and if the work is paid for, a check seems to end the transaction, with too infrequent expression of any gratitude. If a bad result is obtained it is always a nightmare and source of humiliation to the doctor and frequently costs him the price of a malpractice suit, and loses him other good business. If the bad result is a visible one, the patient and the patient's family are always asked who did the work, and only too frequently are anxious to spread the information without questioning.

In reporting these cases the most that I have obtained from them so far is the personal gratification of giving one boy a perfect arm, another boy a perfect leg, and securing better results in a multiple fracture case than I had expected to do or that I had told the family I might be able to do. I might also state that I learned a lesson in finance, and the difference between the legal and medical methods of doing business from one case whose brother had been arrested the week before and was in jail for having a hand in stealing an automobile. After the boy had been taken to the hospital, several x-ray pictures taken and the fracture reduced and dressed, I asked the father for enough money to pay for the anaesthetic and x-ray pictures. He told me he didn't have it as he had had to borrow \$150 the week before to give a lawyer who went to Illinois and got his boy out of jail. The lawyer got his money in advance. I gave service in advance and am still waiting for the money.

The first case is that of a man who fell a distance of thirty feet onto a cement floor, and seen by me in consultation a half hour later. He had an oblique fracture of the upper third of the left thigh, a fracture of the lower end of the left fibula, a comminuted fracture of the radius and ulna just above the wrist, and the right wrist and forearm were badly swollen. Without examining the x-ray picture personally I took the report given me that the right wrist was showing no fracture. The left forearm was placed on a Palmer splint. The leg and hip after reduction of the fractures were placed in a Murphy railroad type of box splint, taking advantage of as much abduction as possible by having the patient laid in bed in an angling position, and holding him there with sheets pinned around the chest in one position, and around the hips in another. Taking it for granted that the right forearm was only badly sprained, it was immobilized and treated as a sprain. When the patient was able to leave the hospital and be taken home in the seventh week, further care was given to him by his family physician. About eight months after his injury he came walking into my office with a slight limp and complaining of considerable pain in his left foot and right forearm. He said his left forearm, which had been badly broken up, was about as good as ever, but his right forearm, which had been sprained, was almost useless. I had another picture taken of the left foot and ankle, and the right forearm. The picture of the left foot and ankle showed the fibula to be united perfectly, but that the injury to the foot had disturbed the relations of the arch to such an extent that his weight bearing center of gravity was displaced inwardly with a breaking down of the arch. A close examination of the picture of the right forearm showed that the carpal scaphoid had been broken

(*) Read before the Section on Surgery of the Indiana State Medical Association at the Muncie session, September, 1922.

in two and displaced backwards. To remedy the foot trouble, an arch support was placed in his shoe, and the inner side of the shoe was gradually built up until it was a half inch higher than the outside. The orthopedic result of this mechanical assistance has been very satisfactory, relieving him of much pain and disability.

The problem of his right wrist demanded operative interference. He was sent to the hospital, and through a dorsal incision the fragments of the scaphoid and part of the semilunar bones were removed. Since that time he has had a gradual improvement and to such an extent that I hope for a complete functional return. Inasmuch as no measures that I know of would have availed in the foot injury, because it involved the ligaments of the arch, and the foot had been supported by a board at the end of the fracture box, it is merely an undesirable complication which will possibly cause him more or less permanent disability. In the matter of his wrist, however, I will say that fractures of the carpal scaphoid are overlooked in a majority of instances in forearm injuries. On the other hand it is a question whether any form of treatment of scaphoid fractures, except removal of fragments, will give anything like satisfactory results. We get as after results weak wrists, painful wrists, and a limitation of extension of the hand. Before the x-ray was available we spoke of these cases as "chronic sprained wrists." The end result is a disability of 25 per cent or more. Ten years ago I reported three cases of carpal scaphoid fracture that I had observed during a period of six months. The diagnosis was verified by the x-ray, and they were immobilized for a minimum of six weeks. The good result I obtained was due to the fact that there was little or no displacement of the fragments. If there is a displacement of the fragments we may get over 50 per cent of disability, constant pain, and muscular atrophy. Dr. Kellogg Speed gave a most beautiful demonstration of these fractures at a meeting of the Muncie Academy of Medicine last spring.

The second case was that of a boy six years old who while running was tripped and thrown by his brother, causing an oblique fracture of the upper third of the right femur. I saw him at home a half hour later, and Dr. Julius Hess, who was visiting me over the week end, assisted me in giving the boy his first dressing. We decided to elevate the leg at a right angle to the body and made a frame over the bed to provide for this and the necessary extension with weight and pulley. This apparently brought the fragments in good position, and we pinned sheets around the boy's chest and fastened them to the side of the bed to keep his body lined up with the leg and for direction of traction. Two days later he had twisted around so much that the

fragments were entirely apart and a large haematoma had formed at the seat of injury. The leg was straightened again, but in the second week I found him twisted again, the foot and leg crossways with his body, and a worse deformity and more swelling than ever. Under ether anaesthesia the leg was taken down and the fracture reduced for a third time, and a side splint applied to the leg in addition to the elevation and traction. In the third week the swelling had not subsided and I discovered a shortening of nearly two inches, so I insisted on the boy being sent to the hospital where I could have some pictures made of his leg, and where I could put him in a frame that would immobilize him from further displacements. When he was taken to the hospital, he was given an anesthetic and replacement of the bone ends was attempted for the fourth time, but found impossible to do. Because of a blister and infection on side of the leg coming from adhesive plaster traction it was not advisable to operate at this time, so two weeks later an open operation was performed and the bones reapposed after removing some muscular tissue that had been interposed between the ends. After the operation the boy was placed in a Bradford frame and the limb in an extension box splint. But in spite of the frame and the extension and the box splint I found the bones displaced nearly every visit, due to the abduction of the upper fragment. I tried all the ordinary methods in the two weeks after the open operation and then hit upon the splint which gave me the good result I finally obtained.

I had a tinner make me an angular posterior trough splint and with overhead apparatus brought the thigh flexed upon the abdomen, and abducted, and with the leg everted got the bone ends in alignment; and with the boy strapped on the Bradford frame was finally able to hold him in position to get a perfect union. The accident happened on October 16, 1921, and the final x-ray plate made on September 25, 1922. The boy was under my care for nearly five months, but the result is worth all the time and trouble it cost me. The boy had perfect use of the limb in two months after he left the hospital, and he has no shortening, no deformity, no limp or sign of the injury save the scar on his leg.

The third case was that of a boy 9 years old who was struck by a switch engine while walking along the side of the railroad track. He was taken to the hospital and an examination showed a fracture of the right humerus two inches from its upper end, with abduction of upper fragment and upwards displacement of the lower. Three attempts were made to secure apposition of the bone ends, and only after the arm was placed in complete extension were we able to approximate them in any manner. To hold

them in this position and keep the arm in extension, I decided upon his being immobilized in bed with the arm in complete abduction. A long straight splint was made and padded to extend from the tips of his fingers, under his back, as far as his elbow on the opposite side. The arm was bandaged snugly to the splint from fingers to axilla. In order to keep traction on the extended arm a sling was placed around the chest up to the axilla and fastened to the end of the board on the side opposite to the fracture. When this sling was tightened up, it pushed the injured arm away from the body and prevented the fragments from overriding. The boy was kept on the flat of his back for four weeks, without any special discomfort, and the final picture taken just seven months after the accident, shows an apposition so perfect that even the fracture line can not be seen.

In looking up the treatment of these humerus fractures I find that Scudder states it is practically impossible to reduce and retain this type of fracture of the humerus without an open operation and wiring of the bone ends. I also find that a number of other splints have been advised for the ambulatory treatment of fractured arms, but some of the so-called aeroplane splints are entirely too complicated. In using this crucifixion splint and putting the patient to bed I believe we have reduced the treatment of fractures of the humerus to the minimum of simplicity, and it gives us the certainty of a better result than any ambulatory immobilization that can be devised. Getting the patient to go to bed is not a hard task when one can assure him of a perfect arm.

DISCUSSION

DR. E. H. CLAUSER (Muncie): I think in these cases we should all bear in mind a few fundamental principles. In a case of oblique fracture where the result may be shortening, we depend upon some kind of extension apparatus, something that exerts a constant pull on the muscles, and shortening will most certainly follow such treatment. In case of transverse fracture we must see that the fragments are properly placed, and it makes not much difference what kind of dressing is applied.

Many times these cases fail because the reduction is not complete. I believe a great many more fractures can be reduced through manipulation than are being properly reduced today. One of the difficulties is that we do not take enough time, and we do not have the proper facilities. I believe if enough time is taken and the proper anesthetic given, oftentimes the most difficult transverse fractures can be properly and satisfactorily reduced through manipulation. Many times fractures may be reduced through internal manipulation and maintained

without applying any metal about the bone. I wish we could get away from the old extension appliances in fracture of the femur and insist on good primary reduction, even if open operation is required.

DR. H. R. ALLEN (Indianapolis): A common cause for failure in fracture work is that we permit plausible appearances to blind our reason against the use of what is really essential. Broken bones are just as broken at the end of ten days as they were at the time of the accident, and this interval is ample to figure out the exact mechanical requirements for any fracture. Then why not figure them out? If you cannot do it alone, get someone to help you. If you want to do good fracture work, ask a carpenter what he would do and then think it over. He can think farther and faster than a doctor along mechanical lines because his ideas are basically sound and ours wrong. In Doctor Austin's case, every time he followed the book he failed; but when he used his own good sense his patients began to get well.

In regard to the "cure" of fractured carpal bones by enucleating them, I was a guest at the meeting held in this city when Doctor Speed read his paper. If a surgeon enucleates or amputates a part he acknowledges his surgical inability to correct that part. To refer to such procedures as cures is simply a bad use of good English.

In regard to injuries of the scaphoid bones, we should all remember that the long arch of the foot is by no means a complete semi-circle. The only semblance of an arch is a very short segment of a complete circle. When a low, flat arch is still further lowered by crushing or fracture of one or more of its bony abutments, it begins to act like a toggle joint. Any downward pressure produces a tremendous horizontal tension on the soft tissues that represent the string that was originally designed to keep the arch bowed. If it is impossible to restore the arch, then arthrodesis may become imperative.

In restoring lowered arches, pressure against the arch is never permissible. There are other methods that succeed that never take the patient off his feet at any time during restoration of the arch.

DR. GEORGE D. MARSHALL (Kokomo): Speaking in general terms of operations on fractures, after you do your operation you still have unusual conditions to deal with, complicated by what has occurred following the fracture. Then, too, I think the less skill a man has in external fixation, the more prone he is to do an operation.

In fractures of the femur, the femur will heal if it has half a chance. In the British hospitals we never came across an un-united femur if the ends were gotten together at all. In fractures

of the upper end of the femur, the muscles pulling the lower ends of upper fragment in abduction, the idea is to get traction from fixed points and keep that leg in abduction.

This is another Bradford splint, and in the application the tuberosity rests upon the ring of the splint. The tuberosity on the opposite side rests on this arm. It keeps the fragments in abduction all the time, and it makes no difference how much the patient moves in bed, the leg is in abduction. It also prevents rotation.

DR. CARROL C. COTTON (Elwood). The doctor spoke about this boy being obstreperous and hard to keep in bed. One of the first fractures of the femur I ever saw in a young person was a boy about eight or ten years old who fell and fractured his femur in two places. I called for help and made a Plaster of Paris cast which extended from his toes to his waist and held the boy so the femur was immovable. This boy was held on the bed at home and stayed there part of the time, part of the time on the floor, but that Plaster of Paris held him securely. I tried that again and again and it worked perfectly. Once after that I had a case with another doctor who believed in mechanical principles, and he suggested that we try mechanical principles in this case. A few days afterwards the boy fell out of bed, and the mechanical principles did not hold him. So I got a doctor to help me who had ideas like my own, and we put him in Plaster of Paris and he stayed there. In six weeks he was in fine condition. In the restless young a long plaster cast is reliable.

DR. M. A. AUSTIN (Closing): In regard to Plaster of Paris, I feel there are so many other better ways of taking care of these cases, but we find once in a while that we have to use Plaster of Paris.

As to hip fractures, Doctor Marshall's splint is merely a slight modification of one that Doctor Allen has used twenty-five years to my knowledge. His old splint had just one piece and it rested on the tuberosity of the ischium. There is no question about the value of this splint, but I did not have one that would fit.

A BRIEF REVIEW OF OTOLOGY TO THE BEGINNING OF THE NINETEENTH CENTURY*

DR. C. H. McCASKEY
INDIANAPOLIS, INDIANA

Until very recently physicians have not been interested in the history of medicine, though they are now waking up and are learning how many practical and valuable hints may be secured from this source.

The history of medicine is an excellent record

of the history of civilization. The culture of a given people is as much indicated by the state of medicine as it is by art or literature. The world is too busy to study medical history to find out what position any nation has attained at any particular time. This applies equally to medical men and the laity. Taken as a whole, the medical profession has but little interest in its own history, yet should one take time to study the history of his own calling he could do nothing which would be more instructive, whether it be viewed from the standpoint of the profession or from the broader one of the development of civilization. Medical students of today and in the past, entering upon their life's work, have not been taught that the knowledge they are learning and applying is not the happening of over night, but that it has required centuries to bring this about, and for this reason we are prone to think that what we are learning is really new and has not been known heretofore, when in fact there is so little that is absolutely new and undiscovered.

The middle ages would be almost the last period in history where one would expect to find any development of the surgical specialties. The treatment, however, of diseases of the ear received a great deal of attention and there is much documentary evidence of what was accomplished. It is known that the story of Herodotus of the Egyptian specialties was drawn mildly and that the human body was divided into thirty-six regions with specialties for each region and that a great deal of jealousy existed whenever they happened to invade each other's region.

The first modern medical school was established at Salerno, not far from Naples. In passing, it is interesting to note the requirements—three years of preliminary study, four years of medicine, and then one year of practice with an established physician before the young physician was permitted to practice.

There have been many volumes written on Otology, as many as in any other branch of medicine and surgery, and yet we are far from an exact knowledge of this phase of medical science. Hippocrates wrote a great deal about Otology, and our first knowledge of this subject was found among the Egyptians.

The Eustachian tube was discussed by Alcmaeon 570 B. C. That is, in his study of anatomy he discussed an opening from the tympanic cavity to the pharynx. There is some evidence that Aristotle knew of this about the year 322 B. C. although no clear and accurate description of this was given until Bartholomeus Eustachius in 1604 wrote a very accurate and precise description of it, and since that time to the present day it has borne his name.

The cochlea was first discussed by a Greek, Empedicles, 400 B. C. in which he described it

(*) Chairman's address presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the Muncie session, September, 1922.

as a snail shaped cartilage described as the real organ of hearing and that the vibrations of air caused it to give forth a tone which was then perceived by the soul.

The acoustic nerve was first described by Erastratus, an Egyptian, during the early dissection carried on in the time of the Ptolemys.

The helix, lob, tragus, and anti-tragus were first described by Ephesus about 100 B. C. This is the generally accepted nomenclature of today.

The fifth and eighth nerves were described as one by Marinus, the preceptor of Galen. During Galen's time, and down to the fifteenth century there was little other than what Galen had furnished used as authority, therefore, there was discovered little about the anatomy of the ear. Although he corrected the idea that the fifth and eighth nerves were the same, and showed that the eighth entered the internal auditory canal, he gave an inkling as to the general plan of the internal ear by calling it a labyrinth, believing that the external auditory canal ended in the dura mater.

There is no record of the ossicles of the ear until the fifteenth century. An Italian anatomist, Alexander Achillini, generally has the credit of discovering these, but it is probable that he and Jacob Berengario first described them, although they did not discover them. This description did not include the stapes.

Berengario was the first to describe the membrana tympani, although he thought the origin of it was in the acoustic nerve or the meninges.

Andreas Vesalius, 1514-1564, who was the most exact anatomist of his day, described the long process of the malleus, the Eustachian tube, the vestibule and the semi-circular canals.

Ingrassia, Colombo, and Eustachius all claimed the honor of the discovery of the stapes, but the weight of evidence was in favor of Ingrassia.

The anatomical writings of Eustachius were published in 1563 before his death, but the "Tabulae Anatomicae" did not appear until 1714, a century and a half later. He was probably unable to publish this on account of his poverty.

Gabriel Fallopius, 1523-1562, died early, at the age of thirty-nine, but lived long enough to establish much for anatomical science. He showed among other valuable points in the anatomy of the ear, that the mastoid cells communicated with the tympanic cavity, and gave his name to the canal through which the facial nerve runs through the passage in the tympanic cavity—Acqueductus Fallopii described the tympanic cavity more accurately and the two fenestrae and their communication with the vestibule and cochlea respectively.

Bartholomeo Eustachio, 1500-1574, described the tensor tympani and stapedius muscles, the

modiolus of the cochlea and gave a good representation of the membranous zone.

Julius Casserius, 1593-1609, was the first to describe the two and a half turns of the cochlea.

The function and physiological action of the ceruminous glands were first described by Stenson in 1665.

In the eighteenth century Valsalva ran head and shoulders above the anatomists of his age, and far exceeded his predecessors in the amount and exactness of his knowledge. He devoted more than sixteen years of his life to the study of the ear and for the purpose of its study dissected more than one thousand heads. He discovered the muscle that opens the Eustachian tube and lifts the palate and showed that the fenestra ovalis was covered by a membrane. He made the mistake of supposing that the ossicles were not covered by periosteum. This was corrected by Frederick Ruysch in 1718.

Cassebohm, 1730, published a monograph upon the ear in six parts, his important contribution being his description of the auditory apparatus in the foetus.

In 1761 Dominic Cotugno discovered the fluid of the labyrinth. This won for him the chair of anatomy at Naples.

Antonio Scarpa, nearly thirty years after the publication of Cotugno's writings, issued a work on the structure of the ear, which was at that time the last word in the anatomy of this structure.

Alexander Monro, 1797, was the last in this series of wonderful anatomists and was the first to trace the auditory nerve within the cochlea, vestibule and semi-circular canals.

Treatment of diseases of the ear during this time did not keep pace with the knowledge of anatomy. This may be due to the lack of knowledge of physiology which obtained at this time, and it is fair to say today that our treatment of these diseases has not kept pace with the knowledge we have at hand, else, we would not have so much variation in the reports of the many authorities.

Hippocrates knew very little of the anatomy of the ear, although he used empiracally some of the remedies we use today, such as heat and cold. One of these was the instillation of warm water. He also believed in mental suggestion to some degree as shown by the following: If any person has a pain in the ear, the physician should roll a bit of wool about his fingers, then pour some warm oil into the ear, then taking the wool in the hollow of the hand, hold it before the patient in order that the patient would think it had come out of the ear, and in order to make the deception complete, the wool should be thrown in the fire. Our interpretation would be that the patient did get relief, not from the suggestion, but from the heat.

Herachides of Torent advised caustics made of verdigris, copper fillings and honey for granulations arising from abscesses in the ear.

Apollonius recommended for earache burned opium in castoreum. He removed foreign bodies by means of a spoon, hooks and probes wound with wool. Hardened cerumen he removed with a solution of saltpetre and vinegar.

Asclepiades recommended instillations for the ear of oil in which three or four cochroaches or an African snail were cooked while a piece of henbane in oil of roses or woman's milk is to be afterward added.

Cornelius Celsus, 44 B. C. and 19 A. D. spoke in detail of disease of the ear in his treatise of medicine. He was the first to recommend vigorous injections of water for the removal of foreign bodies from the ear. In an obstinate case his treatment was to place the patient on a table with the affected ear down, and strike the table with a hammer in order that the foreign body would be dislodged by concussion. He also recommended plastic operations for lost or disfigured auricles.

Archigenes seemed to have some clear notion for pain in the ear. He used venesection, using purgative enemas and a warm bath to the ear by means of a sponge dipped in hot water, but was very averse to cold water. He recommended speaking tubes for the very deaf.

Galen, 130-200, recognized the importance of the ear, inasmuch as it lies close to the head, although his classification of diseases of the ear are minute for this period: 1. Otagia; 2. Hardness of hearing; 3. Cophosis; 4. Paracosis; 5. Paracousmata or hallucinations of hearing. We do not learn much from his writings except the value of agents which will excite the secretions of the nose and mouth which he recommended in aural disease. He complains of the empirical practice of his predecessors.

About this time Marcellus gave us a notion of the popular remedies of the day. Frog's fat was recommended for pain in the ear; the urine of pigs, children and men, and the blood of young chickens for ulcers in the ear. There must have been neglect of ears to a considerable degree allowing larvae to collect, for many writers recommended treatment for worms in the ear.

Paulus Aegineta, 600 A. D. who was a celebrated obstetrician of his day, contributed a great deal to surgery of the ear. He expended much effort relative to foreign bodies in the ear, recommending radical surgery as the best treatment, his classification of closure of meatus was as follows: 1. Congenital. 2. From ulceration, subdivided into superficial and deep.

Guidio Guidi, 1595, recommended leeches used in the nostrils for the inflammation of the middle ear.

The Arabians used warm mother's milk instilled in the ear for the relief of ear ache in

children. If a male is affected, the milk should be from a mother nursing a female child and vice versa.

Peter de la Cerlata was the first to use any form of speculum in opening the external auditory meatus for inspection.

Fallopian, 1523-1562, believed that the discharges from the ear of a child should have no intervention, that in so doing you interfered with nature's effort to throw off morbid material. This teaching continued for more than 300 years. Chronic otorrhea of adults was a discharge from the brain and should not be treated with any form of astringents, but by mild cleansing remedies. He used sulphuric acid to remove polypi.

In the latter half of the sixteenth century Capivacci seemed to have deviated a little from his predecessors. He speaks with more precision of aural diseases.

It was in the latter half of the sixteenth century that enthusiasm for the education of deaf mutes began to present itself.

About this time Lusitanus recites rather an amusing thing relative to cutting off the ears of thieves. He said that this rendered them sterile, therefore no more thieves could be born. His opinion was founded on the statement of Hippocrates that a division of the veins behind the ear rendered a man sterile, because the semen which was generally in the head could no longer pass down to the genitals.

DuVerney in 1683 disproved that pus from the brain would, in all probability, pass through the external auditory meatus.

John Wallis, an Englishman, in the latter part of the seventeenth century, was the first to teach a deaf mute to speak.

Gugot in 1724 was the first to inject the Eustachian tube. He describes thickenings, ulcers and cicatrices of the membrana tympani and says that deafness which arises from the nerve or labyrinth is incurable. He also describes a method of making a differential diagnosis between the peripheral and the central organs of hearing. One end of an iron rod an ell in length was placed between the teeth of the patient, while the other was placed upon a zither. If he could distinguish the tones produced by the vibrations of the instrument, his lesion was in the membrana tympani. If not, it was of the nerve.

We trace one of the delusions which still exists, that is, if the membrana tympani is destroyed, that hearing is necessarily destroyed, to one Hercules Sassonia.

Ambrose Pare, the father of modern surgery, figures in Otology as the first to use a syringe for cleansing the ear. He also recommended artificial auricles of paper mache or leather.

Valsalva gave to us many ideas owing to his excellent knowledge of anatomy. He proved

that the membrana tympani would repair itself. He showed that hearing was only impaired and not lost by perforation of the membrana tympani. He recognized that ankylosis of the foot plate of stapes would cause deafness. He gave us the method of inflating the ear which is named for him. He proved by this method that an eustachian tube which was not patent was a cause for deafness.

Archibald Cleland, 1741, was the first to inflate the Eustachian tube, the nose, and the first to use artificial light for illuminating the ear.

J. L. Petit, 1774, reported many cases of necrosis of the temporal bone; and trephined the mastoid tip, and the patient recovered promptly. This was continued extensively for quite a number of years, until a famous Danish surgeon had it performed on himself and death followed. Following this it fell into disrepute. Petit was the originator of the procedure. With Petit's operation for drainage and catheterization of the eustachian tube, Otology seemed at last to be on a little better footing. It is said that most of the reported cures of deafness by Eustachian inflation were in a great majority of cases young adults.

Julian Busson about this time proposed a perforation of the membrana tympani for relief of pus in the tympanic cavity.

There were many more who described treatment for diseases of the ear, but in the time allotted for this paper I could not mention any more names and all the treatment during this period. It was of such a nature that I noted only the ones which I thought would be of interest to you, and in conclusion will say:

The important progress in this field of medicine is not exceptionally due to any one person, and as a rule a great number of observers from various centers shared in the revelation of new knowledge; very often general practitioners, general surgeons and research workers make the most excellent contributions. This indicates the close relation which should exist between the various fields of medicine. I think this review will show to what a great extent this is indicated, the more exhaustive the new observations go, the more certainly they will set their mark on this subject.

THE MEDICAL PRACTITIONER AND THE AMERICAN SOCIETY FOR THE CONTROL OF CANCER

J. E. RUSH, M. D.

Field Director, American Society for the Control of Cancer.

Among the most important public health problems confronting the medical profession today is that of cancer control. It is possible to make a division of public health movements

into several groups, depending on the amount of educational work which must be carried out before the program can be successful. In one group we find such diseases as Typhoid Fever, Malaria, and Yellow Fever which may be controlled simply by educating a few individuals who possess the necessary power in a community to place the program in operation after they have been shown the desirability of such a procedure. This type of activity is relatively simple because it depends upon the education of a few individuals. Unfortunately, the diseases that can be controlled in this manner are among those which usually do not exact from the populace the greatest economic toll.

Another group of diseases may be effectively dealt with through police power and here again we depend on the education of a few members of any given community. For the most part the diseases which may be controlled by this means we refer to as "communicable" and usually they can be very effectively dealt with by placarding, isolation and quarantine.

There is another group of diseases which are not communicable and in which the education of but a few members of the community is not sufficient to affect the mortality rate. Here we find cancer, which depends for its ultimate control upon the education of every single adult of the community, with reference to the early signs and symptoms of the disease, for only in its early stages is cancer curable. With the present attitude of the public to seek medical advice only when they are aware of distressing symptoms, they must be told that early cancer is usually painless and that proper treatment cannot be instituted until they have sought the advice of a physician.

The medical profession is interested in all types of medicine, whether preventive or curative. As a matter of fact, there really is no hard and fast line of demarcation between preventive and curative procedures any more than there is a dividing line between the metals and the non-metals. The medical profession is interested in all problems of public welfare, but when it comes to matters concerning public health they are the only ones who through tradition and training are capable of handling the problems which present themselves for solution. It is the only profession at the present time that is engaged in real preventive medicine and it is the profession of election for this type of work. Usually public health movements have been initiated by the medical profession, but in many instances the work has passed into the hands of the laity because the members of the medical profession have been pre-occupied with other important problems.

What we have said with regard to the attitude of the medical profession towards public

health work clearly emphasizes the need of control by the medical profession of all public health movements. The profession is particularly interested in the problem of cancer control not only because it is of great humanitarian interest but because of the further fact that cancer is one of those conditions in which it has been clearly demonstrated that the medical profession is the only one capable of offering a solution. While sanitary engineers, epidemiologists and others may be of great value in the conduct of specific public health movements their training and experience does not make them capable of helping in cancer control. The slogan of the American Society for the Control of Cancer that "Early cancer is curable if you will but consult your medical practitioner in time," again clearly emphasizes that the physician is the only one capable of reducing the mortality from cancer.

Another interesting feature of the movement for cancer control is that the establishment of diagnostic clinics during National Cancer Week is of some educational value to certain members of the medical fraternity because important points of differential diagnosis between early carcinoma of tongue, for example, and primary luetic ulcer, are demonstrated. The cancer movement in this respect is one of the few that attempts to repay the physician for the great effort he has expended in its behalf.

It has been claimed by some of the unthinking individuals among the laity that preventive and curative medicine are diametrically opposed. They do not realize that there is, in the last analysis, but little difference between preventive and curative measures. For example, all physicians take blood pressures and make urine analyses during the course of a pregnancy and not by the wildest stretch of the imagination can this be interpreted as a curative measure,—it is a preventive measure pure and simple.

Through various educational movements which are now being conducted to instruct the public with regard to conditions which are definitely preventable, the great mass of the people are gradually coming to realize that the physician must be looked upon as a teacher and advisor rather than one who is to be consulted only when symptoms of a diseased condition have manifested themselves. The physician, too, realizes that this teaching attitude is appreciated by the public for by this means he is able to prevent premature deaths among his clientele. Not only does he spare the patient in question for future usefulness but, more important, he does not divorce the rest of the members of that particular family. The physician realizes that the most appreciative patient is one who, through early advice and proper in-

struction, has been saved from untold suffering and an untimely death.

All health movements if properly managed and ethically controlled by the medical profession will not only eliminate certain objectionable features present in some of them as now conducted by the laity (who have no appreciation of medical ethics) but such activities will help consolidate the medical profession against the ever increasing influence of the cults. It is true, that we as a profession, do not heartily approve of certain public health movements now in progress, because they do not conform to our ethical code. If they were controlled by the medical profession this objection would be removed.

It must be realized that the cults never would have existed had the medical profession taken a definite stand against them, but realizing that "Imitation is the sincerest flattery," we have allowed them to go on, to exploit the public until even the great mass of the people has recognized the lack of sincerity which prompted the various movements.

The proper extension of these ideas relative to organization in order to control public health problems contains within it the answer to the proponents of that most preposterous type of activity known as "State Medicine."

The organization for cancer control is dependent upon the activities of the medical profession; and therefore the units upon which the organization is built are the State and County Medical Societies. The whole movement has been endorsed and approved by practically all national, sectional, state and local, medical and surgical bodies, because it is entirely controlled by the profession itself. In the perfected organization for cancer control, we have the ground work to handle other problems of a public health nature, be they ones already in existence or future ventures. By proper organization, too, we shall be in a stronger position to abort detrimental legislation, whether directed at us or to legalize the ignorant cults. A public health problem directed solely by physicians will do more to properly organize the medical profession than any other type of activity.

It has been pointed out that if we do not seriously consider the "scientific attainments" of the cults, then every preventable death is a reflection on us. It has been claimed that the fact that the patient did not come early enough to us for examination and advice is no excuse;—that we, as the only logical profession engaged in the practice of the healing art should have the undivided confidence of the public to such an extent that they will report to us what are very trivial matters and thus give us opportunity to institute proper procedures in time. In the vernacular of the street, it has been suggested that

we should "sell ourselves to the public"; which in other words means that there is at the present time a great need of ethical publicity on the part of the profession. It really seems that this would, to a very great extent, increase our usefulness to the community in which we practice. If this is true, then no physician can be so busy that he cannot devote a small amount of time to help in the campaign for cancer education, because by so helping, he is not only advancing his own usefulness to his community, but is of the greatest value to his medical brothers and to his profession.

A few members of the laity have explained what they have interpreted as apathy on the part of certain of the medical profession toward preventive medicine, by emphasizing the fact that preventive medicine was diametrically opposed to curative measures. We, of the medical profession realize the fallacy of this. Let us consider an analogy from the field of engineering. Suppose that ten engineers were bidding on a contract to construct a road between two adjacent cities. Only one could be successful; but would the others put obstacles in the way to prevent him from completing his task? The answer is apparent. They would not; for they would realize that when the public had seen the value of this road, they would demand similar ones in all other directions and hence the other engineers would have an opportunity to build some of them. I realize that the above example compares a business conducted purely for monetary return, to a profession which interests itself chiefly with humanitarian efforts, but the very

few of the public who believe that all persons are actuated by ulterior motives should be answered. The good roads analogy applies directly to medicine, for the medical practitioner realizes that each time the public is convinced that it is unnecessary for them to suffer with various ailments they demand the removal of others which heretofore they patiently tolerated. An example may illustrate this point:

A friend of mine who for many years was almost an invalid from recurrent attacks of what was then diagnosed as "inflammation of the bowels" and for which, at that time there was no known cure, was simply forced to allow the condition to exist which undermined his health and lowered his efficiency. At the present time because of the knowledge of the laity concerning chronic appendicitis he would know that an operation requiring him to be at a hospital for but two short weeks, would give him complete relief, and enable him to resume his life's work at a greatly increased efficiency.

Our medical ethics instituted at the time of Hippocrates admit of no change; but our interpretation of them may be broadened to meet the changing conditions; especially those which have been brought about during the past two or three decades. It may be necessary to change our ideas regarding proper non-personal publicity for the medical profession as a whole and for our state and county societies. In this connection I am reminded of the story of the young color-bearer at Gettysburg, who had advanced somewhat ahead of the lines, and when ordered back to his position by his commanding officer replied, "Bring the line up to the flag."

CHRONIC OBSTRUCTIVE JAUNDICE (NONCALCULOUS)

All patients suffering from chronic obstructive jaundice William A. Downes, New York (*Journal A. M. A.*, Feb. 10, 1923), says should be operated on, as surgery offers the only hope of relief. Internal drainage of the bile ducts is preferable to external drainage, just as it is desirable, when possible, to anastomose around inoperable growths in the intestine in order to avoid the formation of an artificial anus. The slightly greater risk involved in anastomosing the gallbladder than in establishing simple drainage is more than offset by the increased comfort of the patient, plus the added advantage of retaining the biliary secretion. Besides, in the event of a cure by external drainage, a secondary operation is necessary in order to close the fistula. Downes has found it easier to unite the gallbladder to the stomach than to the duodenum, and, since the passage of bile through the stomach is harmless, he considers cholecyst-gastrostomy the operation of choice.

THE USE OF CREATININ AS A TEST OF RENAL FUNCTION

The creatinin used by Ralph H. Major, Kansas city, Kan. (*Journal A. M. A.*, Feb. 10, 1923), in these studies, came from two sources: urine and a by-product obtained in the manufacture of meat juice. Identical results were obtained from the three samples of creatinin. In normal persons and in patients suffering from various diseases with no renal lesions, the intravenous injection of 0.5 gm. of creatinin was followed by an increased excretion in one hour amounting to three times that excreted during the hour preceding injection. The total excretion at the end of two hours amounted to five times that of the preinjection hour. In chronic nephritis, the kidney fails to respond in this manner, and in the cases studied this increase has been less than 50 per cent. In a number of these patients, no increase at all was seen.

**THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION**

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

Office of Publication, 406 W. Berry St., Ft. Wayne, Ind

APRIL 15, 1923

EDITORIALS

**THE BISMUTH TREATMENT OF
SYPHILIS**

There has been much discussion abroad, particularly in France, concerning the treatment of human syphilis with bismuth, but the subject has received scant consideration in America. The bismuth treatment of syphilis has been developed in France chiefly through the efforts of Sazerac and Levatidi, and a symposium on the subject appeared in the January number of *Annales de L'Institute Pasteur*. Sazerac and Levatidi have utilized various combinations of bismuth but finally have found the tartro-bismuthate of sodium and potassium to be most active and less toxic. They give the drug intramuscularly in a ten percent suspension in olive oil and emphasize the importance of depositing it into the muscles rather than subcutaneously. The latter method is decidedly more painful, while the inconvenience from intramuscular injection is no greater than that observed after subcutaneous injections. A total of two or three grams of bismuth should be given during the first month of treatment. Two or three injections of .2 grams are given daily, after which the patient receives .3 grams twice weekly throughout the month. After this period, treatment may be continued with weekly injection of .2 to .3 grams, or the patient may be allowed one month's rest, after which the regular course is repeated. The only necessary precaution for the patient to observe is a careful hygiene of the mouth. Under this treatment, spirochetes disappear from the primary sore after the first to the third injection. The chancre becomes completely healed within five to twenty-five days, usually within two weeks. The Wassermann reaction if negative at the initiation of treatment usually remains so. If positive the strength of the reaction falls as satisfactorily or perhaps more so than after the use of arsphenamine.

No untoward effects from the use of bismuth have been reported other than a tendency toward stomatitis similar to but usually not as severe as that following the use of mercury. The drug has been found present in the blood and in the cerebro spinal fluid and is eliminated in the bile, saliva, feces, sweat, milk and in the urine. It

appears in the urine eighteen to twenty-four hours after injection and persists from twenty to thirty days after discontinuance of the course of treatment. In secondary syphilis the cutaneous lesions disappear as a rule within a week. The strength of the Wassermann reaction is very favorably influenced, becoming practically negative within two or three months as a rule, but varying considerably as with other forms of treatment. Tertiary lesions improve with almost equal rapidity. This is particularly true of gummata and tertiary skin and mucus membrane manifestations.

In commenting on this subject in an editorial in the *Journal of Laboratory and Clinical Medicine* for January, 1923, from which we have quoted, the statement is made that the immediate results from the injection of bismuth compounds in syphilis appear to be as good or better than those obtained with mercury and arsenic compounds. In any case the drug will be valuable for alternative use with the latter in those cases where the infecting parasite apparently has acquired a degree of tolerance for the drug. It will be several years before the end results from bismuth treatment can be tabulated comprehensively. We have been concentrating our attention on attempts to rid the body of the spirochete and to obtain a serological cure, and in doing this we have lost sight of a clinical cure which is often not obtained until long after the Wassermann reaction has become negative.

THE SLAUGHTER OF THE INNOCENTS

Under the above title we published in the January number of *THE JOURNAL* an editorial comment from the *Journal of the A. M. A.*, December 9, 1922, concerning the death of two children who had been offered up as a sacrifice to the Christian Science faith. One of the children, a Cincinnati high school girl, was taken sick on October 24. Her mother had faith in divine healing and therefore did not call a physician. Nine days later events had shaken her faith enough to make her willing that a physician should be called but not enough to be willing that the physician should administer anti-toxin. The girl died the next day. The second case was that of a boy about seven years of age who died on November 19 from diphtheria after a week's illness. No doctor was called and the parents in the statement to the press said that they were Christian Scientists and did not believe in doctors or antitoxin, and they saw no reason for making any fuss over the case any more than over any other death.

Since the publication of this article the Christian Science Committee on Publication, with headquarters at Indianapolis, has sent us for publication a communication in which an intimation is made that there is some question about

the cases having been treated by Christian Scientists and that, anyway, an isolated death under Christian Science treatment does not deserve condemnation. The plea is made that Christian Science will compare favorably with medical practice in healing all manner of diseases, and that cases declared absolutely hopeless by reputable medical doctors have been healed successfully under Christian Science ministrations.

We are quite accustomed to receiving communications from the publication committee of the Christian Science Church in which we are taken to task for some unfavorable mention of Christian Science practice in connection with the treatment of the sick, and at this late date we are not going to begin the publication of these effulgent but wholly unjustifiable praises of Christian Science healing. As a matter of fact deaths under Christian Science healing are far more common than the public knows, and neglect to adopt proven measures that save life should be considered a crime. In our judgment the Christian Science healer who alone treats a child sick with diphtheria and that child dies, ought to be prosecuted as a contributor to the death of the child. We have no patience with a practice, under the guise of a species of religion, that either permits of or aids in the death of innocent children. If the person of legal age desires to shuffle off by the Christian Science route, we have no objection to offer, but we do say that public sentiment if not the law should deal severely with those who force helpless children to accept and to die from the ministrations of Christian Science healers.

Christian Science never did and never will cure a disease due to a definite pathological lesion, and it does not compare and never will compare favorably with medical practice in healing all manner of diseases. The trouble with Christian Science is that its followers delude themselves with the alleged cures of imaginary diseases. Analyses of Christian Science cures whenever and wherever made have shown that the so-called cures would not bear serious investigation. Few of even the most ardent disciples of the Christian Science faith are willing to trust to the Christian Science faith for the cure of demonstrable pathological lesions which medical science and medical science alone is known to benefit, but they are quite willing to subject children and other dependents who have no voice in the matter to the fallacies of the Christian Science faith.

The Christian Science Committee on Publication asks us to be charitable and to judge Christian Science by its fruits. We are complying with the request. Diphtheria deaths traced to reliance upon Christian Science faith are fruits enough to cause any sane person to arrive at judgment of a condemnatory character, and we

are charitable enough to wish that the Christian Science healers who are responsible for diphtheria deaths shall be treated with a coat of tar and feathers and hung up to the nearest lamp post as just punishment for their crimes.

CRITICISM OF THE A. M. A.

Every enterprise that does things in a big way is sure to have its critics. Sometimes the criticism is merited, though more often it is not merited and emanates from those who have imaginary grievances or naturally are disturbers. Sometimes the criticism comes from those who have the best interests of the enterprise at heart and the criticisms and the suggestions for improvement are of the constructive kind which ought to be given serious consideration.

From time to time there have been critics of the American Medical Association who have found fault with the policies as well as personnel of the management. We are quite willing to admit that some of these criticisms came from natural fault-finders, and natural born disturbers. On the other hand, much constructive criticism has been offered during the last few years from the real well wishers of the Association, and it has come from men who formerly were high in the counsel of the officers, and a few have occupied such positions as president of the Association and membership on the Board of Trustees. Unfortunately these criticisms for the most part have fallen upon deaf ears at the A. M. A. office, with the result that there has been a smouldering fire of resentment in the minds of these well wishers of the A. M. A. and a host of their friends. This feeling now has reached the point where organized antagonism, and perhaps decisive action, not altogether for the good of the A. M. A., may be expected. We are not in sympathy with the villainous attacks on the A. M. A. and its officers by certain renegade publications that resort to abusive editorials and cartoons to express disapproval of A. M. A. policies, but we are in favor of doing away with the practice of the A. M. A. officials in ignoring honest and constructive criticism from members of the Association, and in attempts to throttle criticism or discussion of certain subjects by means of ridicule and levity that should be beneath the dignity of those who are leaders in a great organization.

The A. M. A. has had a remarkable growth and it has done an enormous amount of constructive work that deserves the sanction and the highest praise from the members of the Association. While much of the credit may be due to the various boards of trustees and chairmen of various committees that have been in operation during the last fifteen years, yet it will be conceded by all that a great deal of credit is due to Dr. George H. Simmons, who as

secretary and general manager of the Association has by his great energy and capacity for constructive work made it possible for the astounding progress that has been made. However, there is a feeling that the Association in being wonderfully successful in the acquisition of property and in fostering publications and educational endeavors, has signally failed to assist its individual members to maintain their economic position in society. The question also has been raised as to whether or not the Association has vested too much power in the hands of a few, and if such power has been wielded in an autocratic way and without the slightest regard or consideration for the opinions or advice of others who have the good of the Association at heart and are quite as capable of judging as to its policies.

It is unfortunate that this condition of affairs has been ignored by those in power in the American Medical Association or has been treated with ridicule, when in reality the criticisms have been deserving of courteous and analytical consideration, no matter upon what basis founded. The refusal to publish in the *Journal of the A. M. A.* a criticism of the A. M. A. and its policies by Dr. Charles A. L. Reade, of Cincinnati, ex-president of the A. M. A., is an instance which bears out the contention that respectful and constructive discussion of the affairs of the Association by its members is in a large measure denied.

We are not in sympathy with those who have grievances of minor nature, but we do believe that the question of making the American Medical Association a democratic organization which represents the consensus of opinion of the majority is absolutely necessary and must be brought about at whatever cost. The idea of having our great American Medical Association run and controlled by a few who put forth every effort to prevent any action that will interfere with their policies, whether such policies are good or bad, is repugnant to the sense of all those who believe in democracy and fair play.

EUGENIC STERILIZATION LAWS

FIFTEEN states have passed eugenical sterilization laws. In five states the law has been declared unconstitutional. Those states which retain the law declare that it is beneficial. It is founded upon the scientific facts of heredity. The notorious cases of the Kallikak and Juke families are outstanding examples of the burden and danger which the unrestrained procreation of tainted children imposes upon society. The eugenical sterilization law is designed to eliminate the further multiplication of such illustrations. Illinois is contemplating such a law, and in commenting upon it the CHICAGO TRIBUNE well says that "action upon this question should

be based upon intelligent judgment and there is no excuse for prejudice based upon ignorance." Unquestioned facts based upon scientific investigation and experience are available. The law should be designed on the basis of these facts and this experience to prevent the procreation of feeble-minded, degenerate or criminalistic children who could not fail to become a burden upon society and a menace to civilization. The surgical operation necessary to prevent procreation is not difficult or dangerous to life or normal activities. All normal functions continue after it as before, except that children are not born. Therefore, the purpose of the law is to protect society, not to punish the individual. Science has proved that such a law properly written and enforced would accomplish the purpose. Every State in the Union should have a eugenical sterilization law, and the law should contain provisions for making it effective.

THE SHEPPARD-TOWNER ACT

Now that the Indiana legislature has accepted the provisions of the Sheppard-Towner Act, which provides a certain amount of funds from the federal treasury, perhaps it would be well to discuss the matter a little further. Much has been said by the sponsors for the bill concerning the value of it in solving maternity and childhood problems, but even the sponsors for the bill admit that there is nothing in it that provides anything excepting education. It provides nothing for care or treatment, nothing for nursing—in fact, nothing except a lot of meddlesome suggestions and advice from a few well paid employees who are under bureaucratic control. That the bill was sponsored by a lot of women's organizations and certain journals like the *Woman's Home Companion* and the *Ladies' Home Journal* is no proof that the Act has an abundance of virtue. The fact that the provisions of the Sheppard-Towner Act are to be under the control of the Department of Labor instead of in charge of some medical department of the federal government is enough to condemn it. At the present time the State of Michigan is wrestling with the subject as to whether or not that State shall accept the provisions of the Sheppard-Towner Act, and in answering one of the supporters of the bill (Paul G. Woolley) the chairman of the committee on Civic and Industrial Relations for the Michigan State Medical Society has the following reply to make, which we think is worthy of reproduction:

One of the curious things about the Sheppard-Towner Bill and its supporters is the pitiful cry set up, when any one dares analyze and expose the fallacies of this seemingly innocent bit of legislation. The Michigan State Medical Journal has not misled its readers in calling

attention to the provisions and lack of provisions, and to the capacity for untold mischief of this folly bill. The Journal has presented plain statements of fact, and the opinions quoted are quite as important and weighty as those expressed by the Ladies' Home Journal or the resolutions of countless clubs and societies, the majority of whose members if questioned would promptly reply—"What is it all about anyway."

Dr. Woolley challenges the claim that the Sheppard-Towner Bill is an invasion of the rights of a sovereign state. Here is what the bill provides. Judge for yourself.

"Any state desiring to receive the benefits of this act shall submit to the Children's Bureau detailed plans for carrying out the provisions of this act within such state, which plans shall be subject to the approval of the board (federal). If these plans shall be in conformity with the provisions of this act and reasonably appropriate and adequate to carry out its purposes, they shall be approved by the board (federal) and due notice shall be sent to the state agency by the chief of the Children's Bureau."

"The Children's Bureau of the DEPARTMENT OF LABOR shall be charged with carrying out the provisions of this act and the CHIEF of the Children's Bureau shall be the CHIEF EXECUTIVE OFFICER."

"Each state shall make such reports concerning its operations and expenditures as shall be prescribed by the Children's Bureau. The Children's Bureau may withhold the allotment of moneys, whenever it shall be determined that such moneys are not being expended for the purposes and under the conditions of this act."

"In other words, Michigan will be like the barn painter to whom the farmer said: 'I don't want to interfere and I ain't got any feeling against any color—use your own judgment—go as far as you like—but if that barn ain't painted red and my kind of red, too, YOU GET NO MONEY.'"

One need be neither very short sighted nor far sighted to see wherein lies the power in this maternity bill. It lies absolutely with the Federal Bureau of Labor in Washington. A purely medical bill is placed in the hands of the laity, when a purely medical bureau is in existence.

If the need exists in Michigan for a Sheppard-Towner Bill, this state is rich enough and human enough to formulate its own legislation—place it in control of its own people and pay the bills. It does not need a bone thrown in the guise of a Federal Aid to wake it up and educate it in a good cause. Why then the anxiety of the proponents of this measure, that a sovereign state should yield up its right to the federal government? Because it is but the entering wedge for further legislation. Today in order to get the measure adopted, the state is assured that it can control but if you will examine the literature which has emanated from the Children's Bureau, you will find that the ultimate aim is a standardization of all activities with supreme control in the hands of the Federal Bureau, in Washington. Today education

is the popular cry of the day. The Chicago packers are "educating" people to eat more meat. Hundreds of thousands of dollars are being spent on propaganda. Everybody is fighting to have everybody else educated and so the Sheppard-Towner Bill has been tacked on to the popular educational and humanitarian kite. Soon it will be flying its own kite and verily the sky will be the limit. Another amendment to the constitution is what these people are working for; an amendment which will provide for Compulsory Health Insurance, State Medicine, Old Age Pensions, Maternity Benefits, the adoption of the child by the state. All the uplifters and welfarers will be provided with jobs at fine salaries, good for life under the civil service. Removal will be practically impossible and then after a life of self-sacrificing ease, they will ask for retirement on handsome pensions. Then you will see every worker with a state or federal parasite on his back whom he must carry and support.

Much is made of a provision in the bill that no employe under this maternity bill can enter a home without the consent of the owner. But they forget to tell that this bill provides no penalty in case a home is forcibly entered. A law without a penalty is worse than no law.

The terrible example of good roads is invariably brought up in any discussion on the Sheppard-Towner Bill. If the government can help build good roads, it can help do anything else. But good roads have the merit of being at least inter-state, while the maternity bill is purely a local measure and Congress has not as yet been given the power to control local affairs.

The attitude of the Surgeon General of the Health Service is readily explained. The politically appointed Surgeon General of the Health Service would find that he was in rather deep, if he assumed to question the attitude of the politically appointed Lady Chief of the Children's Bureau of the Labor Department. What with Brigadier General Sawyer getting ready to amend the constitution—with the ladies a unit in backing up a bureau which has a woman for a head, mere man in the shape of a Surgeon General might find himself in a very unhealthy atmosphere. Washington isn't quarreling with the woman vote at this time. But politics aside, it is difficult to believe that the Surgeon General of the Health Service does not believe that if there must be a maternity and Infant Hygiene Board, it should be under the control of the medical bureau.

It seems to make quite a difference as to whose ox is gored. At the Congressional hearing on the Sheppard-Towner Bill, one of the ablest speakers in favor of the measure and of its being placed under the Labor Bureau was

Dr. Josephine Baker. She told of her work in New York and that it was the purpose of the Maternity Board to follow along the lines laid down in her service. She was asked under what Board her work came. To which she promptly replied the Health Board. One of the committee innocently asked, wouldn't you like to have it placed under the Labor Bureau, but, oh, no, no, no, the lady replied, really the cases were quite different. Dr. Baker's service spent \$900,000.00 for one year in New York City and this is her testimony as to that work.

"Our Service," said Dr. Josephine Baker, "is not for the care of the sick. It is purely educational and teaching people how to keep well. It is not for nursing sick people at all."

If New York spent \$900,000.00 of the taxpayers money on this service, what would it cost the rest of the state outside of New York City and what would it cost the country at large? And when a bit of milk is wanted for a sick babe, when a doctor is needed for a sick mother, when the services of a nurse are required, then the suffering ones must look to the community—the \$900,000.00 a year educational service has taught them to keep well and, if they are so ungrateful as to get sick, why what can a poor Maternity and Infant Hygiene Bill do? Talk is said to be cheap, but it comes high in New York according to Dr. Josephine Baker's estimate. Millions for talk fests but not one cent for anything tangible and practical should be the slogan of the proponents of the Sheppard-Towner Bill. In the language of the street, can you beat it?

Dr. Woolley lays much stress on the *Lay Journals* which have endorsed the Sheppard-Towner Bill. Let us quote a few opinions from men of the medical profession whose opinion I think Dr. Woolley will agree will carry infinitely more weight with the thinking man and woman than will those of state paid servants, journals, catering exclusively to women and organizations which do not hesitate to hail Russia as the saviour of the world.

John Howland, M. D., Pediatrician in Chief Johns Hopkins Hospital:

"In the first place, I am unwilling to believe that such emergency exists as has been claimed regarding maternal care in this country and I am quite sure, from considerable experience with statistics, that there is no basis for the statement that the United States stands seventeenth in maternal death rate. Even civilized countries have not sufficiently accurate statistics to enable any one to make a definite statement such as this. I do not believe that the way to improve health matters in state is by federal supervision or control. Public health depends upon enlightened LOCAL interest. Indeed, it appears peculiar to most physicians who are interested in work for the benefit of children that the care of children should be a function of the Department of Labor. The work is now in improper surroundings. To increase and expand the work of

the Children's Bureau where it now is, is only to make matters worse. Finally and chiefly, I am opposed to the bill because I am opposed to the granting of subsidies to states by the federal government for work which is purely LOCAL in the states. It is to my mind an unsound financial policy and a dangerous step toward the centralization in Washington of matters which properly belong to the states themselves."

Chas. M. Green, M. D., Professor of Obstetrics and Gynaecology, Emeritus Harvard University:

"I take the liberty of writing you (Hon. S. E. Winslow) to express my entire disapproval of congressional action for the purpose of co-operating with the several states in promoting the care of maternity, known as the Sheppard-Towner bill. There are some things that are better left to the education of the people—guided by the medical profession—than to undertake to further such objects by law. You are probably aware that the Massachusetts legislature threw out a somewhat similar bill this last session. It was opposed by the profession generally as a piece of medical communism. I sincerely hope your committee will not favor the proposed bill and put into the Children's Bureau, which knows little of medicine, a problem on which medical men all over the country are now working for the general good."

F. C. Shattuck, M. D., Professor of Clinical Medicine, Emeritus Overseer, Harvard College, 1913-1919, etc.:

"I write to express my disapproval of the Sheppard-Towner maternity bill as now drafted. In the first place I am doubtful as to the principle of the bill. Is nothing to be left to the initiative of the citizen? It seems to me we should go slow in a Germanic assumption by the state of all sorts of control of the citizen. Surely this is a matter that can wait for mature consideration and a time when public economy is less urgent."

Paul Titus, M. D., Obstetrician Western Penn. Hospital, Pittsburgh, Pa.:

"Many of us feel that this measure is quite unnecessary. Prenatal care of prospective mothers is primarily a medical matter, whether the woman be poor or well to do, and neither class of these women can be cared for as they should be by a group of lay social service workers."

Dr. D. E. Sullivan, A. M. A., Delegate New Hampshire State Medical Society:

"The New Hampshire Medical Society, at its annual meeting in May, 1921, adopted resolutions in its House of Delegates by unanimous vote emphatically opposed to state medicine and all such schemes, or either wholly or partly controlled, operated or subsidized by the state or national government. The Sheppard-Towner bill is included most assuredly in this resolution. We protest against such destructive measures in the name of the highest interests of nation and public health and fully realize the grave dangers that would follow enactment of such ideas into law."

Dr. Chas. E. Humiston, President Illinois State Medical Society:

"There are a number of very definite reasons why the Illinois State Medical Society, comprising more than 7,000 members, is opposed to the terms of this bill. One of them is because it uses the practice of medicine as a doorway for the central government to invade the police power of the state under

which the medical practice acts of all states are had and operate. The bill interferes with the practice of medicine for this reason. It appropriates money for the instruction of the people of the various states in hygiene, in maternity and the welfare of babies. That of itself, is doing indirectly what our form of government forbids to be done directly, supervising the practice of medicine which is delegated, or really belongs to the states. It does it in this way; the money which, of course, is collected from the states, as we have no other way of getting money in this country except by taxation, and the people pay it, the money which is available and the funds which are to be had under this law cannot otherwise be had by the different states until the proper body in the state complies with terms laid down by the Children's Bureau in the Department of Labor. Now, that practically says to Illinois, 'If you wish any of this money to spend, make your terms to suit us. If the terms do not suit, you cannot have it.' I want to say right here that further taxation is perilous to the condition of things in this country. I travel somewhat widely and I meet many people and I find that the attitude of the public is sullen, resentful and suspicious. The people feel that they are being overtaxed, that their money has been wasted and they resent anything that looks like more taxes at this particular time. The activities contemplated by this bill I believe to be 95 per cent medical. It is supervising the practice of medicine in different states through a Children's Bureau of the Department of Labor, that this bill provides. That is why we object to it—and when I say 'we' I mean the doctors of Illinois and I might just as well say the doctors of the American Medical Association in this wider sense, because in their meeting in New Orleans a year ago a resolution was passed by the House of Delegates condemning every form of state medicine. Now we object to placing the practice of medicine or any part of it under the supervision of a LAY BOARD. We object to any form of state medicine, whether it is this or any other. We are opposed to the bill, root and branch. It is wrong in principle. The central government has no proper activity in this field. We object to this excursion into socialism. It is not only advice with reference to hygiene that this question covers, that is the question of the mortality of mothers and their babes. It is as much a question also of food and raiment. The bills from foreign countries referred to and quoted provide something very similar to that; I take it this is the opening wedge for the same kind of benefit in this country. While the amount of money here may not seem large, it is small for the purpose, too small to accomplish the object, but it is a beginning. IT WILL NEVER BE SMALLER. IF IT WERE BROUGHT UP TO THE IDEALS OF THE SPONSORS OF THIS BILL IT WOULD BE one billion dollars or more, instead of the one million, four hundred and eighty thousand. A doctor in Illinois is not able to practice in Indiana unless he is licensed by that state. The doctors are licensed by the several states. The general government cannot license a doctor to practice in the other states."

Dr. Fred H. Clark, Secretary-Editor, Oklahoma State Medical Journal:

"As the representative of more than 10,000 active practicing physicians of this great southwest country, I want to express my hope that you will report unfavorably on the bill. First, it is the universal opinion of all physicians, so far as I can learn, who have given this matter any study, that this is the entering wedge looking to state medicine. I am

sure that this country is not yet ready to copy after Austria in adopting state medicine. Second, the financial burden, which this would entail, if carried to a point where it would be of the slightest service to this country at large, would be as much as that which is being asked for at present for the world war; in the face of that, is it consistent for us to give consideration to a project which is purely an experiment and of a doubtful character, even at that? As the representative of the physicians of Missouri, Kansas, Texas, Arkansas and Oklahoma, I beg of you that you will not make a favorable report upon this bill."

Now let us look to some of the Lay objectors to this bill.

Mrs. Frank B. Sanborn, President Riverside Neighborhood House, Massachusetts Public Interest League:

"I hope the Sheppard-Towner bill will be unfavorably reported. I consider it paternalistic, futile and extravagant. The states are able to take care of their mothers and babies without federal aid; the provisions of the bill would accomplish no vital good; although an appropriation of a million and a half dollars is comparatively small, it represents, nevertheless, a good many hard earned dollars paid in taxes. This is no time for unnecessary appropriations, however small."

Cornelia A. Gibbs, Maryland Association Opposed to Woman Suffrage:

"As an organization representing conservative women who stand with the right minded men and realize our interests are identical and that there can be no such thing as women's legislation, we wish to call your attention to the fact that though we may seem to be inarticulate because we maintain no lobbies in Washington, yet in the last election we stood with our men and spoke in no uncertain terms. No obscuring sentimentalism can save us after we once begin to create a paternalism in place of the real democracy that was given us by our fathers. We want to warn you against being forced into action on the ground that 10,000,000 women are demanding the passage of the Sheppard-Towner bill. A high handed way has been found of stampeding organizations; a small group will claim that they speak for thousands and, on investigating, you will find that these groups are made up of childless women, whose interference would be resented by the mothers of America if they knew the government was being urged to put mothers on its pay roll and to make children wards of the state."

Massachusetts Civic Alliance, Eben W. Burnstead, Secretary:

"The reasons behind the legislation are political. It is mothered by political organizations. It will enable positions to be created that it may be possible to use in rewarding and giving new life to organizations which are no longer inspired by the 'Vote for Women' slogan since the nineteenth amendment took from that mission. We plead for return to early standards of self-reliant parenthood, the fulfillment of nativity vows by men making them at the altar and not by the states relieving the husband from them and for the perpetuation of the priceless institution of the family physician, which abroad has too largely disappeared to make place for the panel doctor."

Read both sides of this controversy, Dr. Woolley and you will find that the real physician, the man who is going about his day's work

with love of humanity in his heart, anxious and willing to do all he can to lighten the burden of the sick, is opposed to the Sheppard-Towner Bill. You will also find that the state paid servant, the sanitarian, the salaried men of the medical profession are the ones who are fighting for the bill—not for a love of humanity—not for any desire to help the mother and babe but for self interest pure and simple. Why work long hours, why use up strength and energy oftentimes without a cent of material reward, when a state stands by with what appears to be the purse of Fortunatus to give good jobs, short hours, pay sure, with always a chance to enact a civil service law and then the "Pension on Retirement"? When we are all paid by the state, who will pay the freight? That is the question that will not down even in Russia.

NATIONAL HOSPITAL DAY MAY 12th

Hospitals throughout Indiana have responded most generously to the National Hospital Day movement. Already forty-four states and four Canadian provinces are actively organized and at work on plans for the observance of the day. With such wide-spread activity the hospitals of the country are sure to benefit from the public interest which will be aroused in hospitals and affiliated activities by National Hospital Day.

The following suggestions for observance of National Hospital Day are offered:

Invitation to the public to inspect institution.

Distribution of literature telling of work and needs of hospital.

Graduation exercises of schools of nursing.

"Open house" for high school girls and others interested in nursing.

Inspection of nurses' homes.

Social features.

We also make the following suggestions as to publicity in community:

Local newspapers publish your program for the day.

Churches—Have churches tell about National Hospital Day on the Sunday before May 12th, and invite the public to go to the hospitals to see for itself how the sick are cared for.

Theaters—Moving picture houses will readily aid in the National Hospital Day movement by showing slides, calling attention to the day.

Merchants—Stores might be prevailed upon to have a National Hospital Day window display, showing gifts acceptable to patients or supplies in use at the hospitals. Florists, druggists and stationers might be interested also.

Schools—Throughout high schools, an invitation should be extended to all girls interested in nursing and to their parents to come to the nurses' schools to see for themselves the actual living conditions, educational and recreational facilities of pupil nurses.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

IN California the osteopaths have won a fight to secure appointments to positions in county hospitals. This means that not only osteopathic physicians may be on the staff of a county hospital, but that the interns may be osteopaths. The next thing in order is to place chiropractors and Christian Scientists on the staffs of county hospitals.

DR. G. W. H. KEMPER, ex-president of and even at the present time a member and regular attendant at the sessions of the Indiana State Medical Association, is in California for the winter. He recently celebrated his eighty-third birthday, and judging from his physical and mental appearance one would consider him twenty years younger.

THOSE doctors who will visit Italy this year are asked to avail themselves of special trains, official receptions and courtesies to be extended in connection with a tour of the Italian health resorts that is planned by the Italian State Tourist Department. . . Those who desire to obtain particulars may do so by writing to the Italian State Railways, 281 Fifth Avenue, New York City.

UNITED STATES Public Health reports for January show that a study of weight and height measurements of nearly ten thousand children indicates that weight and height are not an index of nutrition. It is a little amusing to hear some of the self-appointed examiners in baby contests pronounce a verdict based upon weight and height when, as a matter of fact, many other things must be taken into consideration.

MOST of the manufacturers of surgical instruments and supplies used by physicians evidently do not know that the war is over, for they still continue to charge war prices. It was an easy thing to double or triple the prices on the plea

that there was a scarcity of labor and material due to the demands of war, and after once receiving inflated prices it has been difficult to get out of the habit. In consequence we are still paying what seems to be unnecessarily high prices for everything.

THE doctors who are going to the San Francisco session of the American Medical Association should be guarded against acceptance of all of the fairy tales told by railroad representatives concerning best routes of travel, character of service, stop-over privileges, etc. Some of the less important western railways are making a strenuous bid to obtain some of the passenger business and, in order to route passengers over their lines, they are making all kinds of promises, but in the end those travelers who take up with these alluring promises generally find that they could have done better.

OUR committee on Civic and Industrial Relations might with propriety consider the question of contract work by physicians and offer some specific recommendations for adoption by the Indiana State Medical Association. Our attention is called to the fact that some doctors here in Indiana contract to furnish medical services at sixteen and two-thirds cents per month for the whole family. With propriety we might ask what kind of services are rendered, but the point is, will any member of the Indiana State Medical Association place such a low estimate upon his services, and if so, what is the purpose?

IN this number of THE JOURNAL we publish a letter concerning the effort on the part of insurance companies to secure a reduction of professional fees for services rendered in industrial cases. In the cases cited the fees are too low, but as usual the adjusters are attempting to secure a reduction. Isn't it about time for the Indiana State Medical Association to take cognizance of the injustice to the doctor in the settlement of the average compensation case? This is one of the instances where a committee on Civic and Industrial Relations can do some good by investigating the whole subject of professional compensation in industrial cases and bringing in a recommendation for adoption by the Association.

ATTENTION is called to the full page announcement in the advertising pages of this number of THE JOURNAL concerning the "Indiana Special" to the San Francisco session of the American Medical Association. As now planned, steel Pullmans will start from Fort Wayne, Evansville, and Indianapolis for the accommodation of the doctors in northern, central and southern Indiana, respectively, and these cars will form a solid special train at St.

Louis that will go through to San Francisco. The itinerary is an especially interesting one. Stops will be made at many places between Indiana and the Pacific Coast, including scenic points in Colorado, the Grand Canyon of Arizona, and places of interest in Southern California.

THE results of faith healing are to be investigated by Dr. Charles E. Humiston, 449 North Central Avenue, Chicago. He asks the cooperation of physicians who are in possession of reliable information concerning cases treated by Christian Science methods wherein the results have been fatal. Many such cases have been of diseases which ordinarily yield to appropriate medical treatment, such as strangulated hernia and other forms of intestinal obstruction, appendicitis and other abdominal infections and suppurations, diphtheria and other diseases such as typhoid fever, smallpox, and the like. All physicians who can aid in this investigation are asked to send in their reports with full information. The reports will be considered confidential.

A CERTIFICATE from the National Board of Medical Examiners of the United States is now quite generally recognized in this country as well as in Europe. Twenty-two states will issue licenses without further examination to those who hold the certificate of the National Board. We do not happen to see Indiana listed among these states, and perhaps it is but fair to ask our Indiana Board of Medical Registration and Examination the reasons. Certainly the certificate of the National Board may be safely accepted by all State Boards of medical licensure as an adequate qualification for the practice of medicine. Incidentally those who desire to take the examination given by the National Board may secure detailed information by addressing the secretary, Dr. J. S. Rodman, Medical Arts Building, Philadelphia.

THE March number of the *Illinois Medical Journal* contains a signed statement concerning what is considered to be crooked work on the part of an adjuster for the Ben Hur organization, whose name is given as W. H. Owen, supreme organizer, with Crawfordsville, Indiana, as his address. According to the report this adjuster, by trickery and dishonesty, secured information from some Illinois physicians in order to make a final statement for a beneficiary of the Ben Hur organization. In this connection perhaps it is just as well to remind doctors that their records of cases are private, considered so by courts, and office assistants, nurses and others should be instructed to refuse to show the case records to anyone without being requested to do so by the doctor who owns

them. Some of the representatives of insurance companies, and especially those of benevolent orders, have little regard for honesty or propriety when it comes to securing information or services.

A MICHIGAN girl, a trained nurse by the way, desired notoriety, so she feigned sickness and for some little time deluded her physician with what was supposed to be a fever ranging from 110 to 114 degrees. She was able to do this by surreptitiously holding the fever thermometer against a convenient hot water bottle and then later putting the thermometer in her mouth. The peculiar feature about the incident is that the attending physicians did not suspect some sort of trick in view of the fact that the temperature was inordinately high, the pulse remained normal, and there was little else than the supposed fever to indicate that the patient really was sick.

Malingering of one kind or another is relatively common in the practice of every physician, but the well trained and observant clinician will not often be led astray.

RECENTLY some of the leading newspapers of the State contained a full page advertisement of the Lewis Laboratories of Chicago concerning the renewal of youth by gland treatment. As the director of the Propaganda Department of the American Medical Association well says, "No man whose common sense is not blinded by a fat advertising contract could read this advertisement and fail to see stamped all over it evidences of fraud." However, most newspaper proprietors are willing to stretch their consciences to the limit when pecuniary gain is in sight, and as the quack doctors and patent medicine frauds are quite willing to pay the price for newspaper publicity there probably always will be newspapers that will take their advertisements. The public is defrauded, and usually it is the poor and the ignorant or those most deserving of protection that suffer most.

DOCTORS who are thinking of attending the San Francisco session of the American Medical Association should not be frightened by hearing from some of the San Francisco hotels that room rates on the European plan are eight dollars and upward per day, even though usually "and upward" means that most of the rooms are considerably above the minimum rate quoted. It is not necessary to consider the high priced hotels, for there are many excellent hotels in San Francisco that offer good accommodations at rates of from two to three dollars per day for rooms on the European plan. We mention this matter because we overheard one of our doctor friends saying that he had intended

to go to the San Francisco session of the A. M. A. but when he found out that it was going to cost him ten dollars a night to get a place to sleep, and no "grub" thrown in, he decided to stay at home. Accommodations may be secured to suit any purse.

SEVERAL hundred chiropractors are under arrest in Ohio for the practice of medicine without a license. Several have been tried, convicted, fined five hundred dollars and are serving time in jail. The Universal Chiropractors' Association is asking for donations to a jail fund to pay fines and to pay for the time of the chiropractors who are in jail. The chiropractors who are wise will keep out of Ohio or else comply with the law which requires some knowledge of the elementary branches dealing with the human body in health and disease before attempting to practice upon the sick. Why not try Indiana or some of the other states where the chiropractors thrive and are unmolested. What is the use of attempting to get into a state where not wanted and where the sick are protected by reasonable laws.

A FEW years ago about half of the doctors in the country had their offices cluttered up with electric batteries and high frequency outfits which were used without rhyme or reason on practically every patient who stuck his or her nose in the office. Eventually this paraphernalia was junked or at least used only by those men who discriminated in the selection of cases and applied electric treatment only when indicated. Now there is another wave of popularity for electrical treatment being stimulated by the manufacturers, and high frequency treatment is being recommended for almost everything from baldness to ingrowing toenail. Whenever you see a doctor's name attached to extravagant claims for any form of treatment it would be well to look up the pedigree of the doctor and see what his education and training have been, as that will give a little indication as to how much faith can be placed in his recommendations.

A SERIES of articles dealing with medical problems has been appearing in some of the Hearst periodicals, and the same has aroused much comment and some little criticism by medical men and others. Some uncomplimentary things concerning vaccine therapy and in particular the methods employed by manufacturers in exploiting vaccines finally has resulted in a suit against Hearst for damages by Dr. George H. Sherman, the owner and proprietor of some bacteriological laboratories in Detroit. While it may be true that some unwarranted attacks have been made upon the medical profession because of questionable practices, and likewise the

attacks on manufacturers of biological products may in a measure be unwarranted, yet on the whole there is so much truth in what has been said that it is questionable if any retaliatory measures will prove profitable from any standpoint. We shall be interested in seeing what "pitiless publicity" will bring forth. Sometimes discretion is the better part of valor, and it is not wise to stir up animals with vicious tendencies.

AT the last session of the Indiana legislature the chiropractors fought for legal recognition of their form of practice, but they balked when it came to requirements which call for a high school education and three years of attendance at a chiropractic school. Had the bill passed, it would have prevented a lot of chiropractors, formerly janitors, teamsters, section hands and common laborers, from practicing as they do now, and for the reason that they could not furnish the preliminary educational requirements. Some of them also would have been barred when it was demonstrated that their chiropractic diplomas were obtained after but a few weeks of chiropractic training. But why have legal representation in Indiana? Chiropractors are practicing without let or hindrance, and they seem to be doing very well without any laws regulating their profession. Of course, the public pays the penalty for their incompetency, but as long as the public does not kick, why worry, and why try to secure laws that will legalize their incompetency? It is wasted energy.

THOSE who contemplate attending the San Francisco session of the A. M. A. will have the choice of a number of special trains that are being arranged by railroad companies, tourist agencies and medical societies. The Michigan doctors are going to have what is called a "golf special", which means that aside from stopping at scenic points enroute an opportunity will be given the doctors to play golf, with all arrangements for games made in advance. Some of the Eastern doctors are planning another special train which any of their Western friends may patronize, and now comes an announcement that there will be a regular A. M. A. special, which will start from Chicago and go by the shortest route to San Francisco by making short stops at Denver, Colorado Springs and Salt Lake City. Indiana doctors are asked to join "The Indiana Special" which will leave from Indianapolis and be a real scenic trip requiring practically a month away from home. Thus it will be seen that arrangements may be made to suit all tastes, to fit in with any time that is available for the trip, and to a certain extent to fit in with what money one wants to spend.

HOSPITALS not maintained by general taxation right now are having some trouble in refusing privileges to chiropractors and members of other pseudo-medical cults. After obtaining an abundance of competent legal advice on the subject the Judicial Council of the American Medical Association has formulated and rendered an opinion which is as follows:

"The board of control of any hospital (not maintained by general taxation) has the legal right, for reasons sufficient to that board, to refuse the privileges of the hospital at any time to any practitioner, regardless of his so-called school of practice. The fact that a person applying for permission to bring to, and to treat in, the hospital a particular patient is licensed by the state to practice does not alter the situation. The medical staff of a hospital, likewise, has the moral right to refuse to accept as an associate any person whom the staff may consider objectionable for reasons sufficient to the staff and should insist on maintaining that right."—*American Medical Association Bulletin*, March 15, 1923.

THE chiropodists are objecting to the common tendency of the public to call them "corn doctors", so they have adopted the high sounding name of podiatrists as a designation and distinction of their profession. The last session of the Indiana legislature wrestled with a bill which aimed to license podiatrists, and it barred out the itinerant "corn doctor". The bill even had the sanction of some medical men who thought that it was quite the proper thing to raise the standard of proficiency and efficiency of "corn doctors", but, mind you, the bill provided that these so-called podiatrists *could practice surgery of the feet*, and it is very evident that a whole lot of bungling surgical work would "get by" because it was done by licensed practitioners of podiatry who, under the law, would be privileged to compete with the trained and educated orthopedic surgeons of the medical profession. In our estimation Governor McCray was wise when he vetoed a bill which defined podiatry as being "the diagnosis of and medical, surgical and mechanical treatment of the ailments of the human foot".

"DOC" ABRAMS, of San Francisco, now more or less notorious because of his fakery, believes in pulling all the strings possible in order to gain publicity and incidentally the filthy lucre. His latest contribution is a love detector. All you have to do is to hook yourself on one end of the love detector and receive the name, age, and address of your soul mate. Incidentally "Doc" is coining money out of his contraptions, which it is reported he rents on a very substantial monetary basis, and his special courses at

two hundred fifty dollars for a month's instruction are well attended by dupes, there being from thirty-five to fifty taking the work regularly. Incidentally one of the California physicians who rented one of "Doc's" contraptions had an investigation made by an electrical engineer and discovered that the apparatus, reputed to give such wonderful electric reactions, gave forth even less electric radiation than could be obtained by twisting a pig's tail. The worst feature about the whole sickening mess is that anyone claiming to be a doctor will "fall" for such humbuggery and later practice it upon an unsuspecting public.

ONE of the readers of *THE JOURNAL* sends us a number of letters, which evidently are being sent generally to physicians in Indiana, asking for subscriptions to an oil company, and the alluring offer is made to accept partial payments for stock. As usual, the plea is made that the price of crude oil is due to make an enormous jump and that the prices of all oil stocks are going to advance, therefore haste, even by telegraph, is necessary in order to get in on the ground floor. The best place for all letters of that kind is the wastebasket. However, we are satisfied that doctors as a class will pass up conservative investments to grab at any kind of promotion stock that is sufficiently well boosted by glib salesmen. If a doctor who has money to invest will consult his banker concerning investments, it is a safe bet that much money will be saved, and while we are on this subject we might remind our readers that *THE JOURNAL* is carrying the advertisement of an old and well established firm dealing in bonds and other securities, and we believe that no doctor who has money to invest will make any mistake in following the advice of such a firm. Anyway, our final advice is to steer clear of promotion schemes, and oil and mining companies head the list of these.

THE last session of the Indiana legislature passed a bill, later signed by the governor, which gives the osteopaths the legal right to practice surgery and obstetrics, and to use narcotics, anesthetics and antiseptics without the necessity of being required to take an examination in materia medica. This is merely legalizing what was occurring anyway, for the osteopath is attempting to do anything that any other physician is doing, and he doesn't hesitate to prescribe medicine whether he knows anything about materia medica or not. Eventually the chiropractors will get the same legal privileges, and it will be legalizing what they already are doing.

As we have pointed out time and again, all of this agitation for the legal recognition of pseudo-medical cults is with the one object in

view of securing the legal privilege of treating the sick in any manner whatsoever but without going through the formality of being educated and trained properly for the task. When will the public learn that treatment of disease should be based upon diagnosis and in turn diagnosis must be based upon a knowledge of some of the cardinal branches of medicine, a knowledge of which is not obtained in any other way short of the schooling that is required of regular practitioners of medicine. Some day the public may have a better conception of the difference between education and ignorance, and of competency and incompetency, but we sometimes think that it will not come in our generation. Right now we place a premium upon ignorance.

THE A. M. A. has grown tremendously in size and importance and it has sponsored many enterprises connected with the scientific and educational side of the practice of medicine. The work that has been done by the Council on Pharmacy and Chemistry of the A. M. A. is of inestimable value, and the Propaganda for Reform has been a direct help to the public. However, there have been many questions of economic value to medical men individually and collectively considered that never have received consideration at the hands of the American Medical Association, and most all efforts to interest the A. M. A. in such questions have met with little encouragement. Building up and maintaining the largest and best medical journal in the world and acquiring valuable property in the way of buildings, printing presses and equipment is commendable, but there is room for some constructive work that directly benefits the struggling practitioner of medicine in helping him to solve some of his problems that should have consideration at the hands of the great parent organization. For that reason we are in favor of a suggestion that has been made that there should be a Council on Polity as one of the standing committees of the Association to discuss and recommend measures that are of benefit to the medical profession. The American Medical Association has lost much of its democratic character and we have delegated too much responsibility and too much power to a few, with the result that the interests of the medical profession have, in a measure, been neglected. Therefore, we believe that such changes of policy as have been recommended by some of the leaders of the profession but to which a deaf ear has been turned should be forced upon the Association for consideration.

IN the correspondence department of this number of *THE JOURNAL* we publish a letter with a criticism of the Council on Pharmacy and Chemistry of the American Medical Association

which we think in a very large measure is unjustified, though the main point of the letter, in calling attention to the inadequacy in the instruction in materia medica and therapeutics in our medical colleges, is well taken. So far as the Council on Pharmacy and Chemistry is concerned, we believe that that body deserves the highest commendation for the work it is doing. It is a clearing house which separates the good from the bad in pharmaceutical preparations, and protects the medical profession from impositions, intentional or unintentional, practiced by manufacturers. The medical man ought to know what he is prescribing, but in reality he does not know unless some such dependable information as furnished by the Council is placed at his disposal, for the manufacturers are notoriously given to commercialism—sometimes of the rankest sort—and the most extravagant claims as to ingredients and therapeutic efficiency are made concerning many preparations that are offered the medical profession. One would think that doctors should obtain their knowledge of materia medica in some other way than by appropriating and using extravagant and misleading claims of manufacturers, but in reality it is surprising how often doctors are prone to accept such information and be guided by it.

We quite agree with our correspondent that the instruction in materia medica and therapeutics in most of our medical colleges is very meager and unsatisfactory. This phase of medical education deserves improvement, but along with the more thorough and practical courses in this branch of medicine, we must have the cooperation of the Council on Pharmacy and Chemistry of the A. M. A. in analyzing and proving out the efficiency of the newer pharmaceuticals; eliminating the inconsistencies in the combination of pharmaceuticals as practiced by some manufacturing concerns; and properly discounting the extravagant claims concerning therapeutic virtues.

At the last session of the Indiana legislature no one seemed to take any particular interest in the prevention of a raid upon the taxpayers' money required by the acceptance of the provisions of the federal Sheppard-Towner Act. As a direct result of this apathy and indifference on the part of medical men who should have pointed out the bad features of such legislation, Indiana has gone on record as accepting the Sheppard-Towner Act provisions, whereas the State should have refused to be a party to the upholding of such a manifest piece of "pork barrel legislation". Illinois is now wrestling with the question of whether to accept the provisions of the act or not, and the medical profession in that State is pointing out the fact

that the Sheppard-Towner Maternity Act is "pork barrel legislation" from start to finish. As the *Illinois Medical Journal* well says, the protesting taxpaying citizens have a bland idea that in some blanket fashion this Sheppard-Towner Maternity Act intends to dole out adequate care and shelter to mothers and children in poverty stricken homes where maternity is almost perpetually the order of the day and where the necessities of decent living are not. That is exactly *not* what the Sheppard-Towner Maternity Act has any intention of doing, and is exactly what the average citizen of the United States does not know and has been pretty carefully kept from knowing. That the Sheppard-Towner Maternity Act *does* intend to put upon the taxpayers' bounty list herds upon herds of investigators, inspectors, record keepers, red tape winders and political healers of any creed, sex, race or color, who will be legally entitled to know as many intimate details about a man's wife as he does himself, and to inscribe this knowledge on the public documents of the country is exactly what the average citizen does not know. Under the mask of education as to what maternal care should be, this bill intends to limit its benevolence to paying the salaries of the scouts, sleuths and maternal secret service. The money may be expended in accordance with demands of a bureau under the control of the Department of Labor, no matter how fantastic, foolish or dangerous the demands may be. The only people who will benefit will be the people on the pay roll. The apostles of unrest have won their first objective of socialized medicine.

THE nursing problem in Indiana has a number of angles for consideration. Recently the State Board of Examination and Registration of Nurses has been reading the riot act to several hospitals concerning the amount and character of training given nurses, and early in February a meeting of several hospital managers and the members of the Board was held in Indianapolis for the purpose of discussing the proposition and, if possible, settling some disputed points.

We are quite in sympathy with any effort to enforce rules and regulations concerning the amount and character of training that nurses shall have before entitled to registration. However, the question seems to rest upon a rather arbitrary dictum concerning the character of the training and the exact methods of giving it, and some of the hospital managers are inclined to believe that the Nurses Board is unduly exacting and working an injustice to the whole subject of nurse training by imposing exactions that can not be complied with except in the very

large institutions with larger means and facilities.

We have no hesitation in saying that we approve of any honorable means to raise the standard of ability of trained nurses, for there is no doubt room for the highly specialized nurse. On the other hand we contend that some provision should be made for the development of a very large number of nurses for practical work, and the suggestion is offered to a majority of the hospitals of Indiana who are now having some difficulty in meeting the stringent requirements of the Nurses Board, that they combine in an effort to educate and train nurses for practical work, and that a liberal prescribed course of instruction and training be adopted and rigidly enforced. This plan need not interfere in the least with the regulations governing the creation and licensing of trained nurses, but it will make it possible to give a great many sick people the advantage of employing the practical nurse who can serve efficiently and well in all ordinary cases and for compensation that is in keeping with the income of the average family.

There probably always will be a need and a demand for the highly trained nurse, but there is a greater need for nurses of the practical kind who can be educated and trained at a far less expense of time and money so that they are capable of rendering valuable services in the average cases which make up the great bulk of suffering mankind.

A WELL known firm manufacturing chemicals and pharmaceutical specialties has refused to advertise in *THE JOURNAL* unless we discriminate in their favor and use our influence to secure some big contracts for them with the State Board of Health and some of the larger hospitals of the State. This particular firm for years has been trading upon its reputation, which we admit is good, but under the pressure of competition of firms that are making products equally as good they probably are beginning to lose out and are attempting to regain their prestige through medical advertising, though they directly or indirectly have a string tied to every advertising contract that they place. Another well known firm had one of their preparations rejected by the Council on Pharmacy and Chemistry of the A. M. A., and in retaliation they are withdrawing their advertising from most of the organization owned medical journals. Still another well known firm wrote us to the effect that when we become more lenient and accept advertising of any pharmaceutical preparations whether such preparations have been passed by the Council on Pharmacy and Chemistry of the A. M. A. or not, they will consider an advertising contract with us.

All of these firms are well known and manufacture many thoroughly trustworthy products, most of which have been approved by the Council on Pharmacy and Chemistry of the A. M. A. They do, however, possess not only the commercial instinct which prompts them to attempt to secure increased sale and profit for their wares, but they are tinged with just enough of the spirit if not the intent of questionable practices to prompt them to seek unfair advantage. These firms ought to know, and they eventually will know, that their fight against ethical medical practice and the high ideals of the organization medical journals, which journals now practically control the medical journalistic field, will not win out but end in disaster for themselves.

The Council on Pharmacy and Chemistry of the A. M. A. is a clearing house for the medical profession, where the good in chemical and pharmaceutical specialties is separated from the bad, and where the stamp of approval is placed upon honesty of intent and purpose, and where questionable methods are disapproved and condemned. The organization medical journals, which include the *Journal of the A. M. A.* and the various state journals, now are conducted on a very high ethical plane, and their advertising pages are as clean ethically as are the reading pages. In other words, these journals attempt to protect the readers from either intentional or unintentional fraud, and from all practices that may be considered questionable from any point of view of the ethical doctor. No unfair nor discriminating influence can be purchased by an advertising contract, nor are the editors intimidated by threats of any kind. The advertising pages could be made very much more profitable if these efforts to safeguard interests of the medical profession were not followed so rigidly, but the editors and managers of the organization medical journals all feel that there is a moral obligation at stake and they are not going to lower the standard for the sake of the pecuniary gain that might be secured. The medical profession deserves to know something about this policy and what it means, and likewise those commercial firms that patronize the advertising columns of organization medical journals should realize that the acceptance of their advertising in a measure is an endorsement of themselves and their products. In fact it should be the highest aim of firms who desire the respect and patronage of the medical profession to meet the requirements of the Council on Pharmacy and Chemistry of the A. M. A. as concerns their products, and to also meet the requirements of the various official medical journals as the requirements may pertain to the character of the

goods advertised and the commercial methods employed in their sale. On the other hand, the readers of these official journals ought to be very skeptical of the claims and the practices of firms that ignore the Council on Pharmacy and Chemistry of the A. M. A. and who are unable to meet the advertising requirements of the various official medical journals. The firm that is really worth the confidence of the medical profession will have no difficulty in complying with the requirements exacted.

DEATHS

WILLIAM M. CASEY, M.D., died at his home in Seymour, February 27, at the age of seventy-five years. Dr. Casey graduated from the Medical College of Ohio, Cincinnati, in 1878.

EMORY WATSON BRUNER, M.D., died at his home in Jeffersonville, February 26, at the age of eighty-two years. Dr. Bruner graduated from the Miami Medical College, Cincinnati, in 1867.

A. P. W. BRIDGES, M. D., of Danville, Indiana, died at the Methodist Hospital, Indianapolis, March 14, at the age of sixty-six years. Dr. Bridges graduated from the Indiana Medical College, Indianapolis, in 1892.

JOHN M. LINEGAR, M. D., of Fairfield, died March 12. He graduated from the Louisville Medical College in 1894. Dr. Linegar was a member of the Franklin County Medical Society, the Indiana State Medical Association and the American Medical Association.

T. B. RANKIN, M.D., died at his home in Scotland, March 13, at the age of seventy-four years. Dr. Rankin graduated from the Medical College of Indiana, Indianapolis, in 1880. He was a member of the Daviess County Medical Society, the Indiana State Medical Association and the American Medical Association.

U. H. MERSON, M.D., age fifty-nine years, died at his home in Anderson, March 3. Dr. Merson graduated from the Pulte Medical College, Cincinnati, in 1886. He was a member of the Madison County Medical Society, the Indiana State Medical Association and the American Medical Association.

WALTER N. SHARP, M.D., died at his home in Indianapolis, March 8, at the age of sixty-four years. Dr. Sharp graduated from the University of Vermont College of Medicine, Burlington, in 1885. He was a member of the Indianapolis Medical Society, the Indiana State

Medical Association and was a Fellow in the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in **THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION**. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE Elkhart County Medical Society held a meeting at Goshen, March 1.

DR. R. O. McALEXANDER, of Indianapolis, has been elected president of the Federal Life Assurance Company.

BLACKFORD county has opened a new thirty-five bed hospital at Hartford City. Miss Emma Stoll is superintendent.

THE Knox County Medical Society held a meeting at Vincennes, March 13. A paper was presented by Dr. Vance A. Funk.

DR. JOHN A. GIBBONS, of Mitchell, was operated for chronic appendicitis at the Joseph Eastman Hospital, Indianapolis, March 22.

THE Jay County Medical Society held a meeting March 8 at Portland. A paper on "Sequellæ of Influenza" was presented by Dr. J. J. Kidder.

DR. MILLARD KNOWLTON, formerly of Indiana, has been appointed epidemiologist of the Connecticut State Department of Health, beginning April 1.

DR. JOHN G. SCIFRES, of Indianapolis, and Miss Marguerite Schuck, of Bridgeport, were married February 8 at the home of Dr. Scifres in Indianapolis.

DR. W. A. HOLLIS, of Hartford City, recently returned from a two weeks' trip through the East during which he attended the special eye and ear clinics.

DRS. J. F. BARNHILL and LAFAYETTE PAGE, of Indianapolis, attended the annual meeting of the American College of Surgeons at Buenos Aires in February.

A COMPLETE sterilization outfit has been donated to the new Clinton County Hospital by James M. Snyder. The complete outfit will cost approximately two thousand dollars.

DR. C. S. O'BRIEN has moved his office from the Hume-Mansur Building to the Indiana Pythian Building, Indianapolis, with practice limited to diseases and surgery of the eye.

THE Northeastern Indiana Academy of Medicine held a meeting at Kendallville, April 12. A paper on "The Primary Anemias" was presented by Dr. Charles P. Emerson, of Indianapolis.

THE Delaware-Blackford County Medical Society held a meeting at the Hotel Roberts, Muncie, March 9. A paper on "Adenoma of the Prostate Glands" was presented by Dr. C. M. Mix, of Muncie.

THE annual meeting of the American Bronchoscopic Society will be held in Atlantic City, N. J., May 9, the day preceding the meetings of the American Laryngological, Rhinological and Otological Society.

DR. GEORGE DOCK, formerly holding a professorship in the University of Michigan and of late years connected with the Washington University at St. Louis, has changed his residence to Pasadena, California.

THE Boone County Medical Society held a meeting at Lebanon, March 6. A paper on "Bone Tumors" was presented; and Dr. James Wynn, of Indianapolis, presented a paper on "Some Types of Dyspnea; Their Diagnosis and Treatment".

A MIDDLE-AGED woman, residing at 3444 N. Illinois street, Indianapolis, writes us that she desires to secure employment as an assistant in a doctor's office. Any of our readers who are interested may secure further information by writing to the address given.

EXAMINATIONS for applicants for commissions in the medical corps of the United States army will be conducted at Fort Benjamin Harrison, July 16 to 20. At the same time examinations will be held at Fort Thomas, Kentucky, and Fort Haynes, Columbus, Ohio.

THE Wabash County Medical Society held a meeting at Wabash, March 15. Dr. C. J. Cripe, of North Manchester, presented a paper on "Pernicious Anemia" and Dr. George D. Balsbaugh, also of North Manchester, presented a paper on "Care of Cardiac Patients".

THE Tri-County Medical Society held a meeting in North Vernon, March 14. Dr. Solomon, of Louisville, Kentucky, presented a paper on "Usual and Unusual Things in Group Practice". The Tri-County Medical Society consists of Jackson, Jennings and Bartholomew counties.

THE Chicago Lying-In Hospital is undertaking a further study of hydatidiform mole,

especially as concerns its relationship to malignancy. Case reports from outside physicians are solicited. Communications should be addressed to Robert B. Kennedy, M.D., care of the Hospital.

A VERY useful monograph on the treatment of syphilis is being distributed to physicians who request it by the Abbott Laboratories, of Chicago. This brochure brings out the salient facts pertaining to the use of arsphenamines in this disease, including a simplified technic for preparing and injecting solutions.

DR. C. S. WOODS, formerly superintendent of Methodist Hospital, Indianapolis, now is in charge of St. Luke's Hospital, Cleveland, succeeding C. B. Hildreth, who resigned. Dr. Woods is at present the president of the Protestant Hospital Association and the National Methodist Hospitals and Homes Association.

A BILL has been passed in Michigan making it a felony to sell or to have in one's possession any habit-forming drugs. The measure, as well as making the offense a felony instead of a misdemeanor, has a search and seizure clause, with the same scope as that applying to the liquor laws. The bill was passed on March 14 and will go into effect immediately.

THE Department of Commerce has announced that provisional figures compiled by the Bureau of the Census for the first nine months of 1922 indicate slightly higher death rates than for the corresponding nine months of 1921. For the states compared, the death rate for the nine months was 11.7 in 1922, against 11.6 for the first nine months of 1921. The highest mortality rate for the nine months is shown for Maine (14.3) and the lowest for Idaho (7.8).

DURING March, the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Abbott Laboratories:

Sulpharsphenamine-Abbott.

Borchardt Malt Extract Co.:

Borchardt's Cod Liver Oil and Iron Iodide.

E. R. Squibb & Sons:

Sulpharsphenamine-Squibb.

Nonproprietary Article:

Sulpharsphenamine.

PROFESSOR BERGONIE, of Bordeaux University, has been awarded the Carnegie Gold Medal. Professor Bergonie is a victim of x-ray research, whose right arm and three fingers of the left hand were amputated.

Money grants from the Carnegie Foundation will be given to Dr. Charles Vaillant, of La

Riboisiere Hospital, who a short time ago underwent his thirteenth operation of amputation, made necessary by the withering effects of x-ray, and Professor Leray, another sufferer from the rays.

DR. G. FRANK LYDSTON died in Los Angeles, California, March 14, 1923. Dr. Lydston was a prominent genito-urinary surgeon of Chicago and was the author of many medical books as well as several very entertaining books of travel and anecdotes concerning the medical profession. Dr. Lydston is reported to have been the first doctor to do gland transplantation in this country. He will be remembered as the one who a few years ago fathered an attack against the A. M. A. and particularly against the secretary and editor.

THE College of Physicians and Surgeons of Columbia University has received from William Perry Watson, consulting medical director of the Prudential Insurance Company of America, a gift of \$5,000 for the establishment of a permanent fund to be known as the Dr. William Perry Watson Foundation in Pediatrics. The annual income from this fund is to be given to the member of the graduating class showing the most valuable work in the study of the diseases of infants and children during a regular course at the college.

THE American Proctologic Society will hold its twenty-fourth annual meeting at Los Angeles, California, June 22 and 23, 1923. The profession is cordially invited to attend the public sessions. The meeting place and headquarters will be at the Hotel Alexandria and clinics will be held at the Los Angeles County Hospital. Papers will be presented by representative proctologists from all over the country. Dr. Emmet H. Terrell, of Richmond, Virginia, is president of the society and Dr. Ralph W. Jackson, of Fall River, Massachusetts, is secretary.

SEVENTEEN delegates were appointed by Governor McCray as delegates at the annual meeting of the National Tuberculosis Association which is to be held in Santa Barbara, California, June 20 to 23. They are as follows: Dr. Alfred Henry, Dr. A. E. Amos, Miss Alice C. Bush, Miss Mary A. Meyers and Murray Auerbach, all of Indianapolis; Mrs. A. F. Bentley and J. A. Veneman, Evansville; Dr. Wier Milev, Anderson; Dr. W. G. Crawford, Terre Haute; Dr. Amos Carter, Rockville; Herbert E. Graham, Gary; Dr. George T. MacCoy and William G. Irwin, Columbus; Mrs. J. P. Wason, Delphi; Mrs. E. B. Ball, Muncie; Dr. Eric Crull, Fort Wayne, and Dr. St. Clair Darden, South Bend.

A PERMANENT state health council has been organized in Indianapolis by representatives of state organizations engaged in some form of public health work. It has been organized for the purpose of co-ordinating all state health work under one head. The following organizations and agencies were represented: Indiana Parent Teacher's Association, the Child Welfare Association, Indiana Dental Society, the state industrial board, the medical department of Indiana University, the state federation of women's clubs, the Indiana Tuberculosis Association, the Nursing Bureau of Tuberculosis and Child Hygiene, Indiana State Medical Association, and the state board of health.

THE Salt Lake County Medical Society is arranging for the entertainment at Salt Lake City, Utah, of visitors who may be able to stop over enroute, either going to or coming from the A. M. A. convention at San Francisco. The Society has appointed committees to greet and assist in making arrangements to see the city and, if possible, some of the surrounding territory, which may include wonderful mountain drives: a visit to the Saltair, which is situated on Great Salt Lake, and a visit to the great copper mines in that vicinity.

Large parties intending to make this stopover are requested to give notice to the society as far in advance as possible, as to the number in party and length of time of stopover. Inquiries relative to this matter should be directed to Secretary Dr. Floyd F. Hatch, Deseret Bank Building, Salt Lake City, Utah.

THE Citizens Military Training Camp for 1923, will open at Camp Knox, Ky., about July 27, 1923. Recruiting campaign for this camp will commence about April 10, 1923. Each applicant must be examined physically and all accepted candidates must undergo the regular anti-typhoid paratyphoid prophylaxis and be vaccinated against small pox, unless they present to the camp authorities a certificate from a physician certifying that they have been successfully vaccinated against small pox, and that within the past three years they have been inoculated against typhoid and paratyphoid A and B. One of the most important factors contributing to the success of the 1922 summer training camp was the fact that about ninety per cent of the accepted candidates had been vaccinated against small pox and received the typhoid-paratyphoid prophylaxis before arriving at camp, a service which was gratuitously rendered by the physicians of the state of Indiana. Physicians of Indiana are asked to volunteer to make these examinations without cost as a feature of our National Defense. Accepted applicants will be instructed to call at the office of those physicians who volunteer to do the

work. Anti-Typhoid serum will be furnished from the Army laboratory, Fort Hayes, Columbus, Ohio, upon application, without charge. The applicant will be required to furnish small pox vaccine at his own expense.

SOCIETY PROCEEDINGS

"LET'S GO—3000 MEMBERS FOR 1923"

To realize this, our President's slogan for this year, it will be necessary for every county society to increase its membership over that of 1922.

The following list comprises the counties who have already done this, and it is hoped that in the succeeding numbers of *THE JOURNAL*, this list will grow until it includes every county society. If the secretary of any of the smaller county societies will demonstrate to Dr. Combs that his county society cannot show further accessions because of the fact that every eligible doctor is already a member, the name of this secretary will be placed at the head of the list.

County	Secretary
1. Adams.....	B. F. Beavers
2. Dubois.....	W. D. Bretz
3. Elkhart.....	S. T. Miller
4. Knox.....	C. E. Stone
5. Noble.....	S. E. Munk
6. Whitley.....	F. G. Grisier
7. Allen.....	D. D. Johnston
8. Boone.....	W. H. Spieth
9. Daviess-Martin.....	H. C. Wadsworth
10. Gibson.....	A. H. Rhodes
11. Rush.....	J. M. Lee
12. Shelby.....	F. E. Bass
13. Warrick.....	W. F. Ford
14. Floyd.....	P. H. Schoen
15. Fulton.....	A. E. Stinson
16. Huntington.....	M. G. Erehart
17. Monroe.....	F. H. Austin
18. Porter.....	C. H. DeWitt

ST. JOSEPH COUNTY

The St. Joseph County Medical Society has been having some very interesting and able speakers at its regular weekly meetings. On February 27 Dr. Max Peet, of Ann Arbor, Michigan, gave a very interesting lecture on the subject, "What Can Be Done in Neurological Surgery?" On March 6th George Cooper, physical director of the South Bend Y. M. C. A., talked on "Postural Therapeutics", showing the need of physical training in the correction of many of the deformities of children. Dr. J. B. Berteling of South Bend entertained the Society on March 13th by relating the early history of medicine in that locality. On March 28th the Society met in social and scientific meeting at the Oliver Hotel. South Bend, where dinner was served to sixty physicians. Dr. J. S. Pritchard, of Battle Creek, Michigan, was the speaker of the evening and spoke on "Non-Tubercular Conditions of the Thorax", illustrating his subject with many lantern slides. The meetings all are well attended, and the members are showing more interest than usual.

CORRESPONDENCE

STATE HOSPITALS AS TEACHING INSTITUTIONS

Indianapolis, Indiana, March 15, 1923.

Editor, *THE JOURNAL*:

I have just finished reading the editorials in the February number of *THE JOURNAL* concerning "free service offered by hospitals, laboratories, etc.", and write to commend and congratulate the writer thereof on his just, timely and forceful expressions. The medical profession of Indiana is indeed fortunate to have such an able and fearless publication to defend

its rights and interests. Its effort in behalf of higher medical education is noteworthy, and it is entitled to and deserving of the most sincere approbation. The ideas set forth are, in my judgment, worthy of the hearty approval and support of every member of the profession. They appeal especially to me because they are in accord with the policies of institutional management which I followed while superintendent of the Indianapolis City Hospital and which I have consistently pursued as the managing officer of this institution (Central Indiana Hospital for the Insane).

In order more clearly to define our position permit me to quote from a statement to our Board of Trustees in which I advocated that all state hospitals should be made teaching centers, and which was written under date of September 30, 1915. The language is as follows:

"Furthermore, it has always seemed to me that with these CENTERS established, organized and fostered by the State, they would without exception develop into co-operative and active consultation clinics to which many of the borderland cases in the communities would be referred by the family physician for examination, and for instruction to himself as to the future disposition and treatment of the patient.

"The effort and recommendations of these CENTERS should be open-handedly directed to enlarge the personal circle of professional activity and usefulness of those who are engaged in outside practice and who have with the expenditure of much time, labor and money, made a special study of mental and nervous diseases, or related technique, rather than to discount the value of such technical preparation or thwart individual ambition by usurping for such CENTERS the medical function or other prerogative of such practitioners in the community."

Another quotation, for emphasis, taken from the "Retrospect" in our Twenty-third Annual Programme of Clinical Lectures for physicians and students, published in 1922:

"However, it should be understood that we pursue ethical lines towards the profession, and do not in any way usurp the functions of either the Neurologist or Psychiatrist in the community. We are willing, if requested, to help the medical man solve his patients' problems in our field of work, but it must be through him and not without him. Even then, the circumstances surrounding each case are fully considered before we participate."

I believe that these quotations indicate that our institutional management has been in harmony with the spirit of your editorials. I am confirmed in the view that in this respect it has been right and therefore it will be continued.

I heartily agree with you that "the principle of the thing is wrong and that it should be righted". There may be an honest difference of opinion. If an individual is sincere we cannot gainsay his right to have and to hold his opinion, although it may not coincide with our own. Let us therefore hope, in the discussions which will naturally follow, that fairness, frankness and tolerance will prevail.

I trust that even those who now disagree will, after further study and consideration, conclude to assist you in the great fight you are now making for the individual rights and prerogatives of the practitioner. I further trust that your victory will be so decisive that many years will elapse ere another practice of like character will gain a foothold in Indiana.

I am with you in your fight for the interests of the individual physician as well as the profession as a whole and I want you to know it. More power to you. Go on and on and on: May you have the health and strength to continue a vigorous prosecution of this endeavor. I cannot but feel that victory finally will crown your efforts to the end that the individual physician, or laboratory worker, may have his rights restored in full and be permitted to reap the reward to which he is justly entitled. Surely, the doctor is entitled to this reward because of his many

years of self-sacrifice, deprivation, hard study and painstaking efforts. In many cases, in addition to the above, many years pass by ere he gains a competency. The calls upon him for charity or gratuitous services are many, and to his credit be it said, there are not many failures to respond. In view of the above, there can be no question in my mind but that he is not only entitled to earn a livelihood, but more, and that, without interference in his professional field either upon the part of the state or hospitals maintained at public expense.

We feel that we would be negligent in our valuation of your editorial if we failed to endorse heartily your statement that, "The greatest advances have been made through independent individual effort, and whenever you create a dependency and take away the incentive to work, you in large measure destroy productivity and progress." A great truth forcefully expressed, and well worth many repetitions. The "incentive to work", in the profession, is not entirely engendered by a desire to excel in scientific accomplishment, but is closely interwoven with the natural desire to obtain in connection therewith the means of enabling one to maintain himself and family in a befitting manner. The welfare of the state depends upon the success and the achievements of the individual. Therefore, we cannot endorse any policy which inevitably tends to thwart such personal desires or stifles the ambition necessary to work out successfully such objects.

With cordial good wishes, I remain,

Fraternally yours,

GEORGE F. EDENHARTER, M.D.

IGNORANCE IN PRESCRIBING DRUGS

Indianapolis, Indiana, March 13, 1923.

Editor, THE JOURNAL:

Dear Sir:—It is to laugh! Ha! Ha!

In THE JOURNAL of January, 1923, you call attention to the action of the Council on Pharmacy and Chemistry of the A. M. A. in taking Frederick Stearns & Company to task for using the trade name of Esterol for their benzyl succinate, giving the reason that doctors, as has occurred in the past, are liable to prescribe the drug twice in the same prescription.

What a lot of intelligence a physician must possess who prescribes any drug or remedy that he is unfamiliar with. Is such a physician, if physician you can call him, of any more importance to the community than a chiropractor? However, upon reflecting, what can we expect when in the best or class "A" medical colleges the chair of materia medica is a joke and instruction in this important branch of medicine is left to the detail man who imparts the instruction after the student's graduation. Would not Hippocrates laugh in his sleep? I dare say the physician to "King Tut" knew more!

Very truly yours,

HARRY J. WEIL, M.D.

CHEAP MEDICAL SERVICES

Indianapolis, March 7, 1923.

To the Editor:

I have read with interest your editorial note concerning the condition of physicians in Berlin who accept the fee of one hundred marks per patient per month for all medical services rendered. That is not so bad if we consider the price of living in Germany, and compare the whole proposition with what we have to contend with in America, even in Indiana, where doctors are contracting to furnish medical services for sixteen and two-thirds cents per month for the whole family. If a family is as large as eight in number, the contracting physician is on a par

with our pitiful brethren of Berlin. Probably it is these cheap contract physicians who are sanctioning governmental supervision of the practice of medicine.

D. S. G.

REDUCTION OF PROFESSIONAL FEES IN INDUSTRIAL CASES

Spencer, Indiana, March 30, 1923.

To the Editor:

This morning a colleague handed me two letters, one from the Federal Surety Company and the other from the Fidelity Casualty Company, both letters from Indianapolis representatives, who complained of excessive charges in two compensation cases. I happened to be called in consultation in both cases. One was a compound fracture of the right ulna, with a linear fracture of the radius, in which case the attending physician's bill and mine combined amounted to less than seventy-five dollars. The other case was one with a Pott's fracture, the entire amount of the bill for professional services being eighty-one dollars.

I would like to ask if it is not true that the bills are too low in the first place? Formerly I practiced in Ohio, where the least I ever received from the Ohio commission for even a simple fracture of the radius was seventy-five dollars. Is there in existence in this state a schedule of fees for such work, agreed to among physicians or approved by the Industrial Commission of Indiana? It would seem to me that an established schedule of fees for services for industrial cases that is just and fair to all concerned is desirable, and that the physicians of the state should insist upon reasonable compensation.

Very truly yours,

C. D. GREENE, M.D.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

MERCUROSAL.—Disodiumhydroxymercurisalicyloxyacetate. Mercurosos contains from 43.0 to 43.8 percent of mercury in organic combination. It is claimed that mercurosos is relatively free from irritant action, that it is eliminated without untoward effects on the kidney, and that the toxicity is relatively lower than mercuric chloride or mercuric salicylate. Mercurosos is intended for the mercurial treatment of syphilis. It is administered either intramuscularly or intravenously. Mercurosos is marketed in two forms: Mercurosos Intravenous, tubes containing mercurosos 0.1 Gm., and Mercurosos Intramuscular, tubes containing mercurosos 0.05 Gm. Parke, Davis & Co., Detroit, Mich.—(*Jour. A. M. A.*, March 24, 1923, page 844).

PNEUMOCOCCUS ANTIBODY SOLUTION, TYPES I, II AND III COMBINED.—An aqueous solution of the specific pneumococcus antibodies, Types I, II and III in equal proportions, approximately free from the proteins of horse serum. There is some evidence that this antibody solution is of value in the treatment of lobar pneumonia.

PNEUMOCOCCUS ANTIBODY SOLUTION, TYPES I, II AND III COMBINED.—N. N. R., marketed in packages of one 50 Cc. double-ended vials with a complete intravenous outfit, and in packages of one 50 Cc. double-ended vial. H. K. Mulford Co., Philadelphia.—(*Jour. A. M. A.*, March 24, 1923, page 844).

SULPHARSPHENAMINE.—The salt, disodiumdiaminodihydroxyarsenobenzenedimethylenesulphonate, adjusted by the addition of inorganic salt to an arsenic content of from 18 to 20 percent. The arsenic content of three parts of sulpharsphenamine is approximately equal to two parts of arsphenamine. The

actions and uses of sulpharsphenamine are the same as those of neoarsphenamine, over which it is claimed to have the advantage of greater stability of solution in the presence of air and of permitting subcutaneous injection. For subcutaneous or intramuscular use the drug is dissolved in sterile, freshly distilled water in the proportion of about 0.1 Gm. to 0.3 Cc.; for intravenous use a greater dilution is desirable.—(*Jour. A. M. A.*, March 31, 1923, page 919).

SULPHARSPHENAMINE-ABBOTT.—A brand of sulpharsphenamine-N. N. R. It is marketed in ampules containing, respectively, 0.2 Gm., 0.3 Gm., 0.4 Gm., and 0.6 Gm. The Abbott Laboratories, Chicago.—(*Jour. A. M. A.*, March 31, 1923, page 919).

PROPAGANDA FOR REFORM

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Vita Oil (Vita Oil Co.), consisting essentially of nonvolatile vegetable oil, mineral oil and volatile oils, including turpentine, clove and cinnamon oils with extracts of red pepper and pepper. Gold Medal Brand Sexual Pills (S. Pfeiffer Mfg. Co.), containing phosphorus and extract of damiana and nux vomica. Lovett's Pills (Dr. Lovett Medicine Co.), containing iron, sodium and calcium carbonates and sulphates with traces of plant extracts. Savanol (G. P. Steyh), capsules containing a saponifiable oil with traces of savin oil, apiol and aloin. Loeck's Cough Elixir (L. L. Lyons & Co.), consisting essentially of extract of plant drugs, including ipecac and squill, small amounts of morphin, and acetic acid, sugar and water. Sex-Co. Restorative Tablets (Clyde, Collins Co.), containing strychnin, extract of damiana, iron and phosphorus compound. Compound Tansy, Pennyroyal and Cotton-root Pills (Allan-Pfeiffer Chemical Co.), consisting essentially of iron sulphate, aloes and oil of pennyroyal.—(*Jour. A. M. A.*, March 3, 1923, page 645).

PAN-SECRETIN COMPOUND.—Harrower's Pan-secretin Compound, according to the advertising circular is "an endocrine combination embodying: (1) a specially prepared extract of Islets of Langerhans (pancreas tail), rich in its incretory glycolytic product; (2) an acid extract of the duodenal mucosa containing the pancreatic activator secretion, and (3) a small dose of desiccated calves' tonsils." This formula emphasizes the fact that some of the commercial houses are carrying us back to the days of the shotgun nostrum. It would seem hardly necessary to say that such a combination as Pan-secretin Compound is unscientific, and there appears to be no scientific evidence to warrant the belief that such a combination is of value. Four years ago the Council on Pharmacy and Chemistry published a report on some of the Harrower "pluriglandular" mixtures and gave reasons why such unscientific combinations were not acceptable for New and Nonofficial Remedies.—(*Jour. A. M. A.*, March 10, 1923, p. 717).

PERALGA, A NEW GERMAN SYNTHETIC.—For the past few years American physicians have been relatively free from the propaganda of the foreign synthetic drugs—real or alleged. Recently, however, there have been signs of revival of this type of product. One of the products being endowed with the halo of creative chemistry is Peralga (Schering and Glatz), known in Europe as Veramon. The product is claimed to have been originated in the pharmacologic laboratory of Professor Starkenstein, University of Prague (who has lent his name to a number of statements valuable to the proprietary interests). Peralga is claimed to be a definite chemical compound, made by heating a mixture of barbital and

amidopyrin, and it is claimed that this compound is absorbed without being split up into its component radicles. The A. M. A. Chemical Laboratory investigated Peralga. The examination developed that Peralga is not a definite chemical compound as claimed, but essentially a mixture of barbital and amidopyrin, containing an impurity produced in the fusion of the mixture. To determine if Peralga will produce any effects different from a mechanical mixture of barbital and amidopyrin in the same proportion, a specimen of Peralga and a mixture of barbital and amidopyrin in the same proportions as in Peralga were sent to the Pharmacologic Laboratory of Cornell University Medical College for comparative tests. The summary of the laboratory report was: "We can see no difference in the behavior of cats towards similar doses of the two preparations; the mechanical mixture made in the A. M. A. Chemical Laboratory and the preparation of Schering and Glatz—and they show very little difference between similar doses of barbital and those contained in Peralga. * * * Of course there is no chance of making observations on cats that would show analgesic actions in headache. But since the observable effects on cats are so nearly identical, it is only fair to presume that the 'synthetic' and the mixture are practically alike in action."—(*Jour. A. M. A.*, March 31, 1923, page 942).

PRESCRIBING CODEIN.—Codein is a derivative of opium and hence prescriptions for it come within the purview of the Harrison Narcotic Act, no matter what the individual physician may believe in respect to its habit forming properties.—(*Jour. A. M. A.*, March 31, 1923, page 945).

BIOLOGIC REACTIONS OF ARSPHENAMIN.—The complexity of the physical and chemical properties of arspenamin probably accounts for the complexity of its biologic reactions resulting from the passage through the body. Among the most disturbing of these reactions are the nitritoid or anaphylactoid symptoms occurring after intravenous injection. The earlier studies of the anaphylactoid reactions from arspenamin cleared up certain features, but left the underlying causes untouched. The investigations of Jean Oliver and his collaborators lead to the conception that arspenamin can exist in the colloidal state temporarily at least, and that the temporariness of this state is essential to anaphylactoid reactions. The investigators find that arspenamin has a fairly constant agglutinating titer for blood corpuscles. The presence of electrolyte is essential for agglutination. The work suggests that agglutination by arspenamin occurs during the transition stage from its colloidal into the crystalloidal state in the circulation, and that stabilization in the colloidal state prevents the agglutination. From their work they conclude that there are two phases to the reactions from arspenamin: (1) the early or physical phase, which is concerned with the physical properties of the agent and results in the corpuscular agglutination with multiple embolism, the outcome being fatal sometimes, and (2) the later or chemical phase that results in parenchymatous degeneration of viscera (kidney and liver), this being due to the action of the arsenic ions in the usual way.—(*Jour. A. M. A.*, March 31, 1923, page 920).

Among therapeutic notes culled from the various exchanges we note the following: Melted paraffin, applied generously by spray or swab, is recommended for the relief of herpes zoster. It is applied once in twenty-four hours.—HOWARD FOX, *Journal of the American Medical Association*, December 9, 1922.

A Fine Product In a Convenient Package

SUPRARENALIN SOLUTION 1:1000

is the incomparable preparation of the kind. It keeps well and is put up in a g. s. bottle with cup stopper. By working from the solution in the cup, you avoid contamination of the contents of

the original package.

Ischemic action of Suprarenalin Solution is enhanced and prolonged by the addition of equal parts of Pituitary Liquid (Armour), the Premier Product of Posterior Pituitary.

SUPRARENALIN OINTMENT

1:1000 is very bland and its effects lasting.

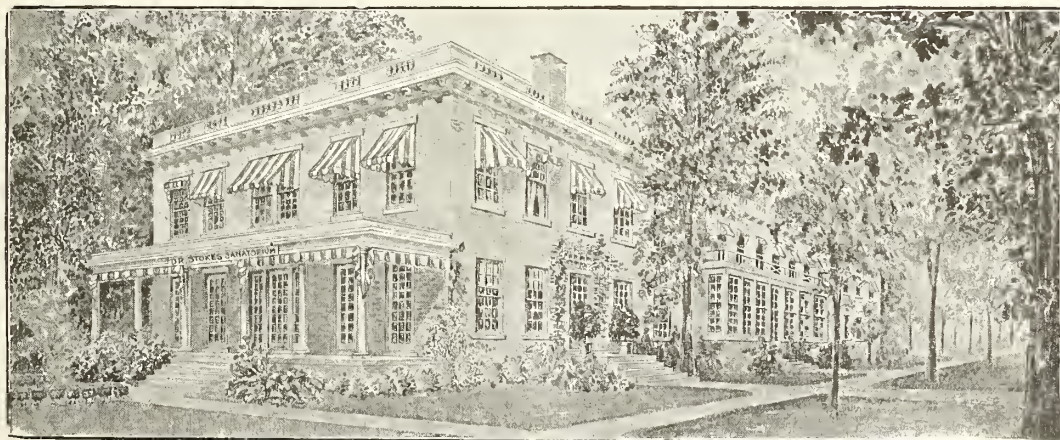
ARMOUR AND COMPANY

CHICAGO



We Are Headquarters
For The Endocrines

DR. STOKES SANATORIUM



HOME FOR THE INCURABLE INSANE, AGED AND INFIRM

A strictly modern sanatorium, fully equipped for the scientific treatment of all nervous and mental affections. Situation retired and accessible.

Alcoholic and Drug Habit Treated by the Gradual Reduction Method Only

An addition of thirty rooms has lately been added to our already large sanatorium. This makes it possible for us to separate all male and female mental patients. For details write

DR. STOKES SANATORIUM

923 Cherokee Road

EDGAR W. STOKES, M.D., Supt.

Louisville, Kentucky

BOOK REVIEWS

TUBERCULOSIS IN INFANCY AND CHILDHOOD. By J. Claxton Gittings, M.D., professor of pediatrics in the Graduate School of Medicine, University of Pennsylvania; Frank Crozer Knowles, M.D., professor of dermatology in the Jefferson Medical College; and Astley P. C. Ashhurst, M.D., associate professor in surgery, School of Medicine, University of Pennsylvania. 275 pages. 23 illustrations. Cloth, \$5.00. J. B. Lippincott Company, Philadelphia, 1922.

This book reports lectures delivered at the Children's Hospital, Philadelphia, under the auspices of the Philadelphia Pediatric Society. In reality it is a more comprehensive discussion of tuberculosis in infancy and childhood than can be found in the general textbooks on pediatrics. That this subject is an exceedingly important one is patent to anyone who takes into consideration the fact that tuberculosis must be taken into consideration in the diagnosis of the vast majority of the subacute or chronic diseases of childhood, to say nothing of the many acute disorders. The book is intended for the general practitioner but will be found of interest to any medical reader. The subject is introduced by a consideration of the various etiological factors, types of tubercle bacilli and their relative importance, childhood infection and immunity, methods of dissemination, and modes of infection. A chapter is devoted to the general principles of diagnosis of tuberculosis from the carefully elicited history to the complete examination, including also the constitutional symptoms which are more or less common to all forms of the disease. The value of tuberculin

in diagnosis is much greater in early life than it is in any other period and detailed instructions are given for the application of the various tests. The clinical consideration of specific forms of tuberculosis begins with diseases of the cervical nodes, with especial reference to differential diagnosis. Then follow the subjects of tuberculosis of the mouth, respiratory tract, ear, eye, pleura, heart and pericardium, gastro-intestinal tract, peritoneum, the viscera and the genito-urinary tract. A chapter is devoted to tuberculous diseases of the skin and another to that of bones and joints, while the greatest space is given to miliary and generalized tuberculosis and meningitis, the most common forms seen in infancy. The final chapter gives a full and detailed description of the treatment of the tuberculous child. The subject matter is well presented and the ideas expressed may be considered as authoritative. The book should be appreciated by all clinicians.

Thrifty Farmer: "Gol ding it! Cynthy left one of them birth-control papers out in the hen-house, an' we ain't had no eggs for a week!"

"What do elephants have that no other animals have?" asked the teacher of her first-graders.

"Little elephants," was the surprising response.

CAVALLERIA RUSTICANA

"Ah, your son has fine manners! He has opened the gate for us."

"That's nothing, Miss. He does that for the cow every morning."—*Die Muskete* (Vienna).

ACUTE BARBITAL (VERONAL) POISONING

Acute barbitol poisoning, in the absence of a history, may easily be mistaken for a number of other diseases giving rise to comatose states. This is especially true of epidemic (lethargic) encephalitis and certain cases of meningovascular syphilis. The case reported by William Cole, Anaheim, Calif. (*Journal A. M. A.*, Feb. 10, 1923), illustrates most of the salient features in the symptomatology. A man, aged 39, married, was admitted to the hospital in a state of profound coma. Search of the patient's effects revealed a box containing twenty 5-grain (0.3 gm.) tablets of barbitol, and a note to his wife expressing his intention of committing suicide. Four weeks prior to admission, he consulted a physician on account of insomnia, and the latter prescribed barbitol, 5 grains, to be taken at bedtime. He took one tablet each night for a week. At the end of the week, he had the prescription refilled, and he took two tablets each night for another week. It was estimated that the patient had taken more than 300 grains (20 gm.) of barbitol in a period of less

than four weeks, 175 grains (11.6 gm.) of which was taken four or five days preceding admission. On admission, the usual conditions giving rise to coma had to be considered; namely, cerebral hemorrhage, alcohol and drug poisoning, epidemic encephalitis, carbon monoxid poisoning, brain tumors, diabetic coma, cerebral syphilis, uremia and unrecognized brain injury. Blood and serologic tests ruled out syphilis and carbon monoxid poisoning. Urinalysis and blood sugar examination excluded diabetes. The previous history of good health and freedom from bad habits practically excluded brain tumor, alcoholism and kidney disease. The history and physical examination eliminated trauma. Carbon monoxid poisoning seemed a plausible explanation for the symptoms at the time of admission, but a more detailed history and the negative blood examination vetoed this opinion. Epidemic encephalitis was simulated very closely; but the definite history of ingestion of large amounts of barbitol, together with the extreme degree of coma, which is not the rule in epidemic encephalitis, led to a definite diagnosis of barbitol poisoning. The patient died. Cole says that this case is the only one reported in recent American medical literature in which there was a fatal outcome.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XVI

MAY 15, 1923

NUMBER 5

ORIGINAL ARTICLES

TUBERCULOSIS OF FEMALE GENERATIVE ORGANS.*

E. E. PADGETT, M.D.

INDIANAPOLIS

ETIOLOGY

Direct: This is by no means a rare condition. On the contrary, it is relatively frequent. The direct etiological factor is, of course, the invasion of the pelvic organs by the tubercle bacillus.

Predisposing: Anything that lowers the resistance of the organs involved, e. g., ovulation, menstruation, sexual intercourse and child-bearing. It is therefore a disease of the child-bearing period although no age is exempt. Kelly reports a series of 29 patients with an average age of 27 to 59 years, the oldest being 47 and the youngest 17 years. My own series varies from 26 to 42 years of age.

Race: Although tuberculosis is prone to attack the colored race, it does not appear in this particular field to be quite as common in the negro as in the white women. My own series of cases comprises eight (8) whites and two (2) colored. Of Kelley's cases, 11 were colored and 18 were white.

Previous Health: This factor appears to be of little concern in this class of cases, much less so than one would expect. In only one of my cases was there a history of previous ill health and she was definitely infected with pulmonary tuberculosis, and had a general tubercular peritonitis. Kelly says that in a series of 19 cases, 14 were well until taken with the present illness and but five (5) stated that they previously had been in ill health. The family history as a rule is good and the appearance of the patient more often than not is anything but tubercular.

Pregnancy shows a definite casual relationship which we have as a rule overlooked. According to Kelly 28% of his cases definitely dated their ailment from a miscarriage or labor. On the other hand, my limited experience leads me to believe that these women are prone to be

sterile. Of four white cases which I have had under observation during the past year only one has ever been pregnant, this one having had two children, the youngest 3 years of age. If cases become pregnant during the process of the disease, they are apt to miscarry.

Trauma: Unless pregnancy and labor can be classed as trauma this factor does not appear to enter into the etiology. None of my cases had been previously operated.

Routes of Infection: As this disease may be either primary or secondary we must consider various and sundry routes of infection. Most text books would have us believe that it is more often secondary, thus assuming the presence of a focus of tuberculosis elsewhere in the body, more often the lungs, although no organ is immune. However, the fact that the disease is not uncommonly manifested in the pelvic organs when no lesion is found elsewhere, is borne out by my last four cases, in three of which no one has been able to demonstrate tuberculosis elsewhere in the body.

Secondary Infection: 1. By direct extension from adjacent organs. The most frequent source in this class of cases is the appendix, and this is closely followed by extension from the bladder, rectum, intestines and abdominal peritoneum. It is quite easily conceived that a tuberculosis of the bladder may extend to the tubes, uterus or ovaries. Doubtless the opposite is true in many cases, the bladder being involved by direct extension from the other pelvic organs. Crossen insists that tuberculous ulcers of the small intestine are a fertile source of infection of the tubes and pelvic peritoneum. 2. From remote organs through the blood and lymph vessels. This is probably what occurs in cases of pulmonary tuberculosis which at autopsy show pelvic tuberculosis which was not known or suspected by either the patient or the physician during the progress of the disease, and in which case the abdominal peritoneum is free from tuberculosis. 3. From distant abdominal organs through the peritoneum. According to Williams, tubercular bacilli may find their way into the peritoneal cavity from the surface of an ulcer and fall into the pelvis without involving

*Presented before the Indiana State Medical Association at the Muncie Session, September, 1922.

the general peritoneum, later to be wafted into the tubes by cilia, and develop there. 4. From tuberculous excretions and discharges carried to the genital organs by the hands of the patient herself.

Primary Infection: In this class of cases the infection must result from causes external to the patient's body. 1. The organisms may be conveyed to the generative organs of a perfectly healthy woman during sexual intercourse with a man having tuberculosis of the genito urinary or intestinal tract. 2. In the same way the use of a syringe that has been used by a tubercular patient may be the causative factor. 3. The disease may be transferred from one patient to another by unclean hands, gloves or instruments. 4. Infected clothing coming in contact with the vulva may result in direct infection.

Relative Frequency of Organs Involved: Authorities are agreed that the organ most commonly involved is the fallopian tube. The uterus is next in order of frequency, and then the ovaries, vagina, cervix, and finally the vulva, which organ is very rarely the seat of the disease. According to Penrose, tuberculosis is present in from 8 to 18% of all cases of inflammatory disease of the uterine appendages. While it may be the only invading organism, it is by no means rarely found in mixed infection. It is the most common seat of primary infection. According to Williams, no one has described a case of primary tuberculosis of the ovaries, and while it is relatively common it is conceded to be secondary to an infection of the tubes or peritoneum. In the uterus the tissue attacked first is the endometrium, and this is probably more often overlooked than diagnosed. It may and does at times invade the muscles. It is either primary from infection below or secondary to tubal infection and is always limited to the body of the uterus.

Pathological Forms: 1. Miliary tuberculosis. This, of course, may be the local manifestation of a general miliary tuberculosis, but in these cases the disease is general, the patient rapidly succumbs and it is not seen as a local disease. Doubtless all cases start as small miliary tubercles, regardless of location or the organ involved. This is the invasion stage and is the fortunate time for the patient if discovered, as it means early invasion and easy cure. 2. Chronic diffuse tuberculosis represents caseous or cheesy pus tubes which are met from time to time. It indicates an active tuberculosis with breaking down of the tubal or uterine structure. This may go on to a state of hardening or inspissated pus. 3. Chronic fibroid tuberculosis in which there is a marked proliferation of connective tissue with little tendency to caseation. There is little tendency to spread to other structures and little danger of dissemina-

tion. The tubes are found to be hard and tortuous and the lumen often obliterated. In the second and third class there are dense adhesions and the formation of mass in the pelvis. The transition between the first and second stage gives us the period of active pus in the tubes or other structures.

Symptoms: The symptoms can be demonstrated best by case report which is typical. Case report 1, Patient Mrs. G.; age, 33; Jewish nationality; admitted to Methodist hospital Feb. 23, 1922, complaining of pain in epigastric, right hypochondriac and lumbar region. Her family history has nothing of significance. Her father, mother, two sisters and one brother are living and well. Tuberculosis, cancer and mental and nervous disease are negative. She is married and has had two children, one six and the other three years old. Generally speaking her health in past years has been good. She had measles at the age of three (3) years. Five (5) years ago had tonsils and adenoids removed. Three years ago had influenza in mild form and with good recovery. Has never had pleurisy, pneumonia or any other disease of the chest. Stomach, bowels and genito-urinary organs are negative, except that one year ago had an acute attack of pain in lower right quadrant of abdomen accompanied by a rise in temperature. A tentative diagnosis of appendicitis was made which was subsequently changed to a diagnosis of pyelitis. Says there was pus found in the urine, at that time.

Present illness began four weeks ago. She is easily fatigued, has lost ten pounds in weight, has poor appetite and pain in hypochondriac, epigastric and right lumbar region. She insists that there is a feeling of weight and dragging in the pelvis with slight tenderness across the lower abdomen. She is unable to lie on right side.

Physical examination presents a young woman apparently in good health. Head, neck, chest and heart negative; nervous system normal. Constant tenderness over gall bladder region, constant tenderness over McBurney's point, slight tenderness across pelvis. Vaginal examination reveals a uterus slightly enlarged, decidedly retroflexed and tender. There is an indefinite feel to the uterine adenexa, suggesting a mass slightly more marked on the right side. A diagnosis from clinical findings was made of chronic appendicitis, chronic gall bladder infection and a uterine retroflexion.

Dr. J. A. MacDonald saw this patient with me repeatedly during her stay in the hospital and contributes the following notes: Central nervous system negative. Chest negative; heart negative; abdomen, constant tenderness conforming to the gall bladder region; caecum

movable but tender, and McBurney's point constantly tender. Right kidney one-half palpable but not tender. Lower pole of spleen can probably be felt. Impressions—Gall bladder infection, chronic appendicitis. Probable chronic right sided pyelitis. Pelvis not examined. Patient entered hospital with a temperature of 98 F. and a pulse of 80. During her stay there was a regular daily afternoon rise in temperature, never, however, going above 99.8.

Laboratory tests: Urine examination Feb. 24, 1922—Clear straw color, acid in reaction, S. G. 1.011, negative for albumin and sugar. There are no pus cells, no blood, a few epithelial cells, and several bacteria. Several subsequent examinations conformed closely to this except that at one time there was a trace of albumin and a few pus cells. Blood count, 2-24-22—W.B.C. 8000, Polynuclears 55%, Small Lymph. 34%, Large Lymph. 11%.

This patient's abdomen was x-rayed by two different men whose reports correspond in essential particulars. The following report is submitted by Dr. Beeler: Suspicious gall bladder; right upper quadrant pressure; stomach negative; general ptosis. The appendix was not visualized. Due principally to her afternoon temperature, both Dr. MacDonald and I suspected tuberculosis in this patient, but were unable to locate it unless it be in the pelvis.

The patient was allowed to return home for a few days' rest and she again entered the hospital March 5, 1922, for operation. She was operated March 8, the abdomen being opened through a mid line incision below the umbilicus. On inspection there was a visceroptosis, an appendix chronically inflamed, a decided retroflexion of the uterus. Both tubes and both ovaries were encased in adhesions and firmly bound down, both tubes enlarged and fluctuant to the feel. The uterine peritoneum and that covering tubes and the structures surrounding the ovaries were thickly studded with small millet seed sized whitish elevations, typical tuberculosis of the pelvic peritoneum. The uterus was not markedly enlarged. The appendix showed no evidence of the tubercular invasion and the disease appeared to be limited to the pelvic organs.

Both tubes, both ovaries, the appendix and the peritoneum covering the uterus were removed. The uterus not appearing to be directly involved was fixed to the anterior wall and left. The patient made a good operative recovery and left the hospital at the end of the third week.

Microscopic findings: Dr. Warfel, of the Methodist Hospital Pathological laboratories, makes the following report: Smear made from pus taken from fallopian tube, negative G. C.

Section from fallopian tube tubercular. Salpingitis.

Summing up symptoms, we may say:

1. History of tuberculosis elsewhere, if given should always cause one to be on the lookout for pelvic tuberculosis, although it is by no means essential that there be such history or finding.
2. History of pregnancy and labor or miscarriage, from which time trouble dates.
3. Long period of sterility.
4. Presence of visceroptosis as demonstrated by x-ray.
5. Rise in temperature, especially in afternoon.
6. Sense of weight or dragging in pelvis, accompanied by slight or moderate pelvic tenderness and pain in lumbar region.
7. Indefinite mass in pelvis on examination.
8. Ability to demonstrate structural tuberculosis either in discharge or in uterine scrapings.
9. The tuberculosis test is always worthy of a trial.

Treatment: In approaching these cases with a view to treatment there are a number of things to be decided. 1. Is the condition primary or secondary? 2. If secondary, what is the location of the primary focus? 3. Is the condition local or general? 4. If general, how extensive and how active is the process?

In the active treatment it seems we have only two methods that have been used. 1. The general curative treatment of tuberculosis whenever found. 2. Operative procedures.

It should go without saying that all cases of general tuberculosis are not good surgical risks. They will perhaps recover from operative procedure but will have their general tuberculosis aggravated. Therefore any case of generalized tuberculosis that may manifest pelvic symptoms will be treated better by general measures and operated only as an emergency measure. In cases of active pulmonary tuberculosis, great care and consideration should be given before any operative procedures are begun. In primary pelvic cases, or in cases where the tuberculous process elsewhere is arrested, operation is the proper method of procedure.

It is always better to use gas or a local anesthetic. Whereas the outlook for a tubercular patient is never a particularly hopeful one, pelvic tuberculosis, like tuberculosis of the peritoneum elsewhere, has a tendency to recover after opening the abdomen. I make it a rule to place the operating table in a window and admit as much sunlight as is possible.

There are doubtless some cases of so-called healed or arrested tuberculosis in the pelvis, as elsewhere in the body; still the tendency to spread to the general peritoneum is sufficient to

warrant one in opening the abdomen on the suspicion of tuberculosis. When tuberculosis is found in the pelvis it is properly treated only by complete removal of the organs involved whenever this is possible. The literature contains some reports of pelvic and abdominal tuberculosis treated with x-ray and radium, but the reports of improvement are not very promising. Werner of Vienna advises that if tuberculosis of the peritoneum or the genital organs is suspected, by all means the abdomen be opened in order that the diagnosis may be confirmed. This exploratory laparotomy must be insisted on, for, as he endeavors to show by citing several cases, the diagnosis is difficult and this is the only way to establish with certainty the tuberculous nature of the disease. If an exudative type of peritonitis is present, the accumulated fluid must be drawn off. If the fluid in the abdomen reappears later, Roentgen irradiation is recommended. In the adhesive type, Roentgen rays should be used at once.

In tuberculous affections of the adnexa, large suppurating tubes should be extirpated if easily removable; if firmly imbedded, they should be left and Roentgen irradiation employed. In cases of large accumulation of pus in the pelvis, and if fever is present, the vaginal route may be indicated in exceptional instances, to be followed by Roentgen irradiation. Werner is convinced that if this method of management is adopted much better results will be secured than in the past.

Tuberculosis of the vulva, vagina or cervix, although rarely encountered, I think would be an ideal field for radio-therapy.

DISCUSSION

DR. CARL HABICH (Indianapolis): Tubercular salpingitis, whether of the so-called caseous or fibrous type, or the miliary type accompanying a general abdominal tuberculosis, is the most frequent of all tuberculosis of the female genital tract. It is always bilateral. The tubercle bacillus may first attack the mucous membrane lining the tubes causing an endosalpinx, or it may attack the peritoneal covering of the tube, causing a perisalpinx. Graves says it is extremely doubtful if primary infection of the tubes ever occurs; also that it is extremely doubtful if ascending infection (as in the case of gonorrhoea) ever occurs. A hematogenous infection implies a metastatic growth of tubercle bacilli which have come by the blood from some distant point. The original focus may heal and the metastasis actively continue, giving the impression that it was the original point of invasion.

A tubercular endosalpinx is the type of tube which so closely resembles the gonorrheal tube. The first stage of the infection is catarrhal, in

that it only involves a superficial inflammation of the mucous lining, but as the tubal ostium closes early the disease may progress to a pyosalpinx. At this point the tube is filled with a thick white cheesy substance which is characteristic, but a superimposed mixed infection, whether gonorrheal or not, causes it very closely to resemble the gonorrheal tube, and these cases are seldom diagnosed as tubercular without the aid of the microscope. The later pathology of tubercular tubes differs from gonorrhea, and they either become caseous or fibrous. In rare instances we may have a resulting hydrosalpinx. Anspach believes that the cases of so-called congenital hydrosalpinx are really the end result of a fetal tubercular salpingitis. Tubercular perisalpingitis is manifested by miliary tubercles on the surface of the tubes, and as it accompanies tubercular peritonitis is diagnosed easily from its appearance. Adhesions are also more dense than in gonorrheal salpingitis, some of the cases even proving inoperable.

As to the treatment, as the endometrium is so frequently involved, it is good surgery to do a hysterectomy in younger women much more frequently than we would in gonorrheal salpingitis in women of the same age.

DR. G. B. JACKSON (Indianapolis): The frequency of primary genital tuberculosis is probably an open question, although most authorities seem to think it a rare condition. To quote Dr. R. T. Frank, "Primary genital tuberculosis may be regarded as a curiosity. Practically all cases have primary foci elsewhere, though in more than half the cases the foci are not discoverable by clinical means."

Tuberculosis is difficult to diagnose, even ordinary pulmonary tuberculosis in its incipency, and most of these cases have foci elsewhere, as postmortem statistics show. Geist says that two per cent. of all female autopsies show tuberculosis in the genitalia. Rosenow says that nine to twelve per cent. of deaths are due to tuberculosis, pulmonary tuberculosis of course predominating, and the second in frequency tuberculosis of the fallopian tubes. We have the statement that eight per cent. of all adnexitis is tubercular, 75 per cent. being of the unsuspected variety, that is, discovered upon routine microscopical examination. I also have the statement here that 20 per cent. of tuberculosis in females, and three per cent. in males, is tuberculosis of the genital tract.

The question of operation in these cases is difficult, because the diagnosis is difficult. I remember a case just a year ago, a young woman in whom I thought we had a chronic or subacute appendicitis. I was not satisfied with the diagnosis, and finally decided to do an exploratory operation. I found in that case a general miliary tuberculous peritonitis with pockets of fluid

here and there and the genitalia absolutely matted together, particularly on the right side of the pelvis—a mass which I took to be tubes, appendix and cecum—you could not separate them. We let out the fluid and closed the wound. She also showed, on careful clinical observation, a focus in the left chest and some pleurisy. That young woman, in spite of all that involvement, and our having taken out none of the pathology, is today well, pronounced to be cured, and engaged to be married next month—a young woman about twenty-one years of age.

This problem of tuberculosis is very interesting.

DR. JAMES S. SHAFFER (Terre Haute): I fully agree with Doctor Padgett that one of the main reasons for operation in these cases is for diagnostic purposes, and I would like to add, also to secure general aeration of the internal viscera. Surely many times this aeration will arrest the progress of the disease.

I also would like to emphasize the fact that this condition is usually found to be secondary.

DR. P. C. McCOWN (Indianapolis): In discussing the treatment there was no mention made of tuberculin. In the male side of the human family I have found great benefit from the use of tuberculin before and after the operative treatment of genital tuberculosis. There is a tendency for the disease to spread from one epididymis to the other in about one-half the cases, and I believe the post-operative use of tuberculin has been of considerable aid, not only in preventing the spread of the tuberculosis to the opposite testicle, but to the prostate and seminal vesicles. I believe in each case of urogenital tuberculosis the use of tuberculin is a very valuable aid, because when once the resistance is broken down the tuberculosis spreads everywhere and the end results are very serious.

I am sorry Doctor Padgett did not mention the end results of tuberculosis in the fallopian tubes and uterus.

DR. KARL R. RUDELL (Indianapolis): Doctor Padgett has been very fortunate to have had such an experience with genital tuberculosis. I have been unable to diagnose beforehand any case of tuberculous salpingitis. I have run across it almost altogether in abdominal operations for one condition or another, and of course it is present in almost all cases of general tuberculous peritonitis in women. Formerly I believe most surgeons advocated removal of all tubes in tuberculous peritonitis. I had a peculiar experience with one patient, a young woman, daughter of a doctor, who had no children and was desirous of having one. We found bilateral tuberculous salpingitis, one tube worse than the other. One tube was removed and the other left. Subsequently she was operated for a rup-

tured ectopic occurring in the remaining tube which otherwise appeared to be normal. It is well known that in most cases of tuberculous peritonitis opening the abdomen results in ultimate cure. This might lead us to believe that that might happen in tuberculous salpingitis.

DR. E. E. PADGETT (closing): I think most of these cases are diagnosed after we open the abdomen. I tried to make the point that it may be secondary, but if we are not able to demonstrate it anywhere else maybe it is primary. At any rate, I believe firmly that all of these cases should be operated unless the general condition will not permit surgery. Tuberculous patients sometimes will not stand surgery. Sometimes they will stand it if you use the right kind of an anesthetic. I think these cases are operable so far as the pelvis is concerned. If the general condition is bad, certainly you would not open the abdomen. Opening the abdomen and letting in light does a great deal. In tuberculous peritonitis it is about all we do. However, we always remove the tubes and ovaries in all these cases if the patient is a good risk.

I have had no experience with tuberculin in these cases.

My patient who had the general pulmonary tuberculosis is still sick. She never developed fluid and never needed to be tapped. She has gained weight and is considerably better, but she is not well. I think she will die of general tuberculosis. The other three are well and feeling fine. Only one had any post-operative temperature after she went home, and I think she will eventually clear up. She has gained fifteen pounds in weight.

PHASES OF CHRONIC PHARYNGEAL INFECTION.*

WM. S. TOMLIN, M. D.
INDIANAPOLIS

The pharynx with its functions and associations is truly the gateway of physiologic life. Here pass both air and food, liquid and solid, upon which sustenance depends, without ceasing, from the first breath unto the last. The guidance of these necessary intakes depends upon its muscular balance and coordination. The voice is much influenced in and by the pharynx and in fact, where the larynx is no longer present, the whisper from it becomes the only substitute. Its relation to tone placement is quite fundamental and quality is not without necessary dependence. As drainage and ventilation way for the middle ear, nature has placed large dependence of the hearing sense upon the pharynx.

In view of the facts in this short resume, chronic infections of the pharynx must assume

*Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the Muncie Session, September, 1922.

large proportions in health problems and come into especially close relation to three of our five senses.

Likewise, being the purveyor of both air and food, the chances for infection are practically double that of any other organ. True, the nose is to act as a strainer and modifier of the air but it may not always do this quite perfectly, besides its own subjection to infection may add much to the insult of pharyngeal tissue and function.

Chronic infection of the pharynx means largely such process in the lymphoid tissue of the organ, for nature has most richly supplied this region with it. That such arrangement is for protection, to the writer is a fairly good working hypothesis, and upon this assumption are based the arguments of this paper.

First, the ground is taken that none of these tissues are to be removed or destroyed until the evidence is clear, from both positive and negative standpoints, that they are damaged beyond useful restoration, and their removal will result in better physiologic pharyngeal balance and improved relationship to other organs and functions of the body. This implies in many cases that efforts at disinfection and improved functions by way of topical applications and general tonic regime should be given a trial before proceeding to more radical measures.

Exceeding circumspection is here called for as when a pharyngitis sicca obtains, no relief may usually be expected until a sphenoiditis or posterior ethmoiditis or both have been conquered, and the glazing of the posterior wall with their noisome discharges discontinued. Likewise follicular pharyngitis depends almost if not entirely upon nasal, adenoid or tonsil emanations. In fact then chronic pharyngeal infection may be said to be largely a secondary condition and to depend in great measure for its relief upon the eradication of other infection.

Upon this basis, limiting this discussion to the pharynx and its content, we would consider the eradication of infections, taking up some phases that seem especially useful and sometimes overlooked.

The adenoid first. How many of us always examine the epipharynx both by touch and by as good direct inspection as possible after adenoidectomy? While some lymphoid tissue must always be left, masses above the atlas and in the supero-posterior fornices should be searched out and so cleared that infection and after enlargement shall be minimized. Rosenmuller's fossae demand especial attention more particularly where reduced middle ear function has been apparent. Both tissues and adhesions here are important and especially the latter where inflation has not at least temporarily improved the hearing. This is also emphasized in those

cases of recurrent tympanic infection because the annulus eustachius is being maintained patent by radiating bands and slight pressure forces infection into the tubes and beyond. Even platitudes sometimes need repetition.

Focal infections in and about the tonsils have been so repeatedly dealt with that this writer will not enter this general field but would recall to mind some specific phases relating to features not usually dwelt upon.

Some years ago Dr. Joseph Beck explained recurrent lymphoid tissue in the inferior portion of the tonsil fossae as overgrowth of the lingual tonsils. While this no doubt is sometimes true it must be rare and a more extended study of cases has convinced me that the usual difficulty arises from a remnant of the plica which, as shown by the studies of Prof. C. W. M. Poynter of Omaha, is very richly supplied with lymphoid nodules. In fact foetal study of development shows that this triangular membrane develops in inverse ratio to the lower division of the tonsil and where that is small in a manner may be considered to supply its insufficiency. In fact the plica triangularis by the same authority is embryonically a part of the tube from which the tonsil develops, and structurally is the same. Corollary to that when the tonsil is removed and the plica or a material part of it is left, its enlargement sometimes is quite phenomenal. Of course, a small part of the inferior lobe may escape the operator, and amidst hemorrhage be overlooked, but one should not be hasty in condemning a previous procedure until the nature of the supposed remnant is well understood. Some years ago one of the great men of laryngology, Dr. G. Hudson MacUen, advised the leaving of the plica intact believing that it was for a better throat and especially useful in the future voice. Under that guidance many of the workers in this field, including the writer, operated with that technique in view. I am sorry to say that notwithstanding the fact that I discontinued in a few months there comes to me yet occasionally one of these "Banquos who will not down" except under another attack, and I hope to be allowed the credit for making it, with thanks for the opportunity, and no charge. Infection lurks in these crypts which Dr. Poynter demonstrates are small replicas of the tonsil depressions anatomically, and where failure to relieve in some distant manifestation obtains, a search in this region may give the answer. The term tonsillectomy is to some extent unfortunate, for the laity—and to a lesser extent ourselves—have come to consider it as the *summum bonum* of this region, whereas it may be, and not so infrequently is, only a part of the work to be done here. Restrictively speaking, a most perfect technical tonsillectomy, leaving the plica or some other tissue to be dwelt upon later, may

fail completely in relieving the patient from the most serious trouble to be continued or to develop later.

All of us have the oft repeated experience of finding some conditions at variance with our expectations, and along this line was the case of Mr. F., age 55, R. R. conductor. His complaint was that of a persistent cough annoying by day and disturbing sleep by night. Subject to repeated colds, in part attributed to exposure. Some tuberculosis in family, one brother dying at about fifty with it. Patient quite stout, even plethoric. Had been slim and somewhat delicate in youth. Beyond this complaint claimed good health. Tonsils appeared quite prominent and on compression showed some cryptic accumulation and on touch disclosed a peculiar doughy feeling characteristic as found in cases showing similar pathology. Tonsils were removed under local anesthetic and showed specimens rather small for the previous appearance. The fossa on the left side operated gave about the usual shiny base. However, it was comparatively so shallow that a reason for that was sought. Gently separating the trabecular tissue there came to view a large mass of gelatinous waxy pus. Removing this left a cavity enormous in size extending to the digastric fossa, and the large vessels of the neck could be easily seen, the carotid pulsating almost within the excavation. The right side disclosed a similar but smaller accumulation. Patient complained of no pain at operation, and when seen that evening was unable to swallow either liquids or solids, and pharynx was in almost full paralysis both sensory and motor. This continued for a full week, the patient getting food and water by rectum. At that time he became able to swallow occasionally some semi-solids, and after about two weeks could with care pass enough by pharynx to sustain him. Later there came tactile sense to the fauces, but there never was the slightest pain though the granulations formed regularly enough and the cavities filled out quite satisfactorily. You may imagine the operator's trepidation of those succeeding days when it looked as if function and sensation might be lost for an indefinite time.

The pus was sterile and practically amorphous and in my judgment was a typical cold abscess originally tubercular. The cough was relieved for a time but there have been some lesser recurrences, and no doubt an x-ray would show old lesions in the chest and beyond attack.

Mrs. S., 52, referred from a neighboring city, complained of progressive reduction of hearing. Fairly well nourished but of low resistance and poor endurance. History of fair health though a subject to frequent colds. Usual diseases of childhood. Right ear showed results of healed

chronic suppuration. Left drum slightly retracted. Hearing right ear 8/20 and left ear 15/20. Tests show nerve degeneration of both sides in addition to that characteristic of chronic suppurative otitis media on right. Appearance of nasal passages that of old chronic rhinitis with tissue destruction and process about spent. Tonsils showed some infection with the doughy feeling described in the previous case. Tonsil-ectomy in hospital under local anesthetic showed fossae as usual by inspection. Extra tonsilar infection was suspected and further interrogations of bases revealed cold abscess on both sides extending past carotids to digastric fossae. Large quantities of inspissated pus, sterile by test, were removed on both sides, and the deep caverns looked truly appalling. Beyond a slight secondary hemorrhage the recovery was as good as usual and the hearing showed slight improvement after three months intermittent exhibition of strychnia and phosphorus. General health, resistance and endurance patient believes are markedly improved. There was a distinct tubercular history in this case.

The last to be reported case of similar pathology is most interesting in symptomatology after history and result.

Mrs. J. S., age 49, past climacteric three or four years, housewife. Present complaint vertigo very marked. Occurs at various times frequently when in recumbency and so severe that must have a companion whenever she leaves home, most marked on any sudden movement of head. This condition has obtained two years and recently is rapidly growing worse. Has had repeated suppuration in left ear occurring in childhood. This ear has been dry for last five years but thinks that she has no hearing in it. Large dry perforation. No fistula sign. Rinne negative, Weber to right. Nose clear. Tonsils showed marked infection. No acute diseases since childhood. General health apparently good.

The tonsils were removed under local anesthesia and large accumulation of sterile pus extending to digastric fossae evacuated on both sides. Laboratory reports no growth whatever. Dizziness for next three or four weeks apparently a little worse requiring confinement to bed most of the time. Then it began to subside and at the end of four months had disappeared and at the end of a year has had no evidence of return.

Without a special search of the tonsilar fossae any of these abscesses would have continued. Similar failures are to be observed regarding infected lymphoid tissue on and around both pillars, and the writer will have made his point if in recalling attention to these occasional shortcomings, men working in this field can more and more emphasize to all the important

differences between tonsillectomy and eradication of pathology in these regions.

DISCUSSION

DR. KARL T. BROWN (Muncie): I agree with the essayist that in these conditions we should positively establish the fact that these tissues are damaged beyond repair before any surgical intervention is undertaken. There has been too much surgical intervention when intelligent treatment would suffice. In most of these pharyngeal infections I believe the chief cause is the nasal or postnasal condition, and if we are to eliminate the conditions we must look to ethmoiditis and sphenoiditis.

The essayist called attention to the importance of inspecting the epipharynx in connection with these infections. I believe that is highly important because we have seen a great many cases of pharyngeal infection in which the tonsils and adenoids have been removed, when on close inspection we have found masses that are the contributing cause of the condition.

DR. G. W. SPOHN (Elkhart): In this age when we have so many young men who are good laboratory men, we should have a laboratory examination made of the tonsils and everything should be done that can be done to clear up these cases. The younger men want to know the bacteriology of these things, they want to know whether the patient has the staphylococcus, the streptococcus, or the pneumococcus in the tonsils.

Doctor Tomlin alludes to feeding these patients by rectum. I have had some experience in that regard and I do not hesitate to say that there is no use feeding them per rectum. That is all psychological. These cases will get along nicely if they are determined to swallow, and they can swallow if they only try.

With reference to follicular pharyngitis being due to enlarged tonsils and adenoids, I wish the author had said more about that. Follicular tonsillitis is an infectious disease due to some special germ. The microscope will tell the story—often better than the clinical symptoms.

DR. D. O. KEARBY (Indianapolis): After a study of tonsillar infections from a bacteriological standpoint I have come to the conclusion that it does not matter what particular organism you may have in the tonsil that is causing the symptoms or infection. Expressing with a wire loop, one can secure a bit of exudate, provided it is fluid enough to express, quickly make a bacteriological examination in the office, and isolate the organism, whether it be the staphylococcus, the streptococcus, or what not. However, this does not always eliminate the presence of infection somewhere. It is more than likely that in Doctor Tomlin's cases expression would not have given him free pus, because many

times we are unable to express pus, and yet from the appearance of the anterior and posterior pillars and from the general signs, the patient may have arthritis, neuritis, etc. Or the internist may have eliminated every other condition that might be a causative factor and send the patient to have the tonsils removed. If you operate you will find a cold abscess back of the tonsil. So along with the bacteriological findings you have to use common judgment. It appeals to me that those of us who do ear, nose and throat work have gotten too far away from the treatment side and expect to cure everybody by some operative procedure.

The thing that bothers me in adults that come to the office is that in examining the nasopharynx up into the epipharyngeal region, where diseased tissue has been removed we still find some adenoid tissue. In these cases it is very difficult to tell how much infection you may have back in the crypts that have small openings. Formerly, it was my idea that I should operate and remove that lymphoid tissue. After operating on a number of cases I find these patients are coming back to the office with a dry secretion that sticks over the site of the scar. This condition is very troublesome.

DR. C. NORMAN HOWARD (Warsaw): I would like to ask Dr. Tomlin a question in regard to the lymphoid tissue which we see on the posterior wall of the pharynx in chronic pharyngitis. Do you think these masses of lymphoid tissue are only an expression of the irritation to which the pharynx is being subjected, or do you believe they might contain sufficient pus to become foci of infection?

DR. HARRY A. VAN OSDOL (Indianapolis): I would like to ask Dr. Tomlin if he localizes these cold abscesses by palpation from the outside? I would also like to know if these cold abscesses were underneath the superior constrictor muscle, and if he had to separate this muscle to reach these cold abscesses, or if he thinks they were the results of an old peritonsillar abscess?

DR. W. A. HOLLIS (Hartford City): Doctor Tomlin has brought to us again a condition that occurs in our routine practice. Granular pharyngitis is common and is usually easily relieved temporarily.

I would like to speak of a case in which there was an extreme condition of this kind, on which I fell down badly. This was a high school girl whom I treated a year before for purulent ethmoiditis, and she was apparently cured. She later developed a cough and hoarseness and was going down in weight to an alarming degree. I transilluminated the sinuses with negative results. She was a cleanly little girl, keeping her nose free of pus and scabs, and I overlooked

the fact that she had cleansed her nose. I was suspicious of tuberculosis and sent her down to Doctor Emerson and Doctor Cole, who went over her, with negative results. They called in Doctor Overman, who found an infected antrum. I treated the antrum with irrigation and suction, with good results. The granular pharyngitis has entirely disappeared and after six months there is no recurrence. It is up to us to find the infection in these cases, and it is not always of tonsillar origin.

DR. CARL H. McCASKEY (Indianapolis): These cases are very unusual, especially the one in which the abscess was situated beyond the superior constrictor muscle. We can very easily overlook that sort of thing by palpation, inspection, or by any of the other methods of examination. I think the important point was the Doctor's persistency after operation. He went further than the glandular fossa, hoping to find some cause for the trouble. If it had extended into the fossa or pharyngo-maxillary fossa, there would not have been any enlargement of the anterior cervical glands, or even of the tonsils.

Relative to posterior pharyngitis, I have never forgotten a statement made to me at one time—that in a case of pharyngitis if the nose is entirely clean and free from infection, you would not need much treatment to take care of the posterior pharyngitis. I think that holds true to a large extent if you eliminate everything else about the local area. If Doctor Tomlin will pardon me for mentioning the larynx, as the condition is confined wholly to the epipharyngeal area, I think that is proven especially in acute laryngitis. I believe if, in cases of acute laryngitis, the posterior nasal or epipharyngeal space were thoroughly treated, you probably would not have to treat the larynx because of a possible extension of the infection about the area which is causing the laryngitis.

I am glad Doctor Tomlin mentioned the question of plica tonsillaris. Doctor Poynter, of Omaha, read a paper relative to the embryology and anatomy of the plica tonsillaris, and since hearing that paper I have at least attempted to get rid of the plica tonsillaris, because it usually causes more trouble in post-operative conditions than any other one thing with which we have to deal.

Doctor Hollis' case was very interesting—a case which any of us might overlook. He admitted it, and I think brought clearly before us the thing that caused him to overlook the infection. He saw the patient soon after the nasal cavity was thoroughly cleansed. Transillumination could easily be negative, or plates would be negative, and she probably would not have much symptomatology arising from the infection in the antrum after a certain length of time.

DR. W. S. TOMLIN (closing): Artificial feeding in the first case was not done on account of pain, nor was it done for psychological effect. The patient made absolutely no complaint of pain at any time after the operation.

Follicular pharyngitis, as I have attempted to make clear, is always, in my judgment, a secondary condition and is dependent on infection in some other portion of the naso-pharynx. Treatment is of no avail except temporarily until you find and eradicate the infection in some other portion. Acute pharyngitis is a simple thing and will usually clear up under topical applications; but a chronic pharyngitis which is dependent on other infections, does not clear up so readily.

As to the bacteriology, in each case the abscess was sterile both on microscopic examination and cultivation tests. There was a distinct tubercular history in two cases, and while there was no such history in the last case I was strongly suspicious that this had been true.

The nodular enlargements in the pharynx, mentioned by Doctor Howard, produce infection of the pharyngeal crypts with some hypertrophy, and sometimes hyperplasia of the lymphoid tissue studded over the wall of the pharynx. Generally speaking, after the other infections are relieved, they will disappear. The most successful treatment is to touch them with the galvano cauter.

Two of the abscesses were located within the superior constrictor muscle of the pharynx, and one was external to it; but they were all very large and in the caverns you could have put a large sized hen's egg. There was no adenitis to any appreciable extent. I did not locate the abscess by external palpation in any case.

The main thing I have tried to bring out has been developed in the discussion. We must get away from the terms "tonsillectomy" and "adenectomy." Hundreds of cases are taken to the operating room, the tonsils quickly taken out, the adenoid spaces scraped, and that is the end of it. The removal of the pathology from the throat is the end to be attained.

THE SURGICAL ENGINEER*

H. R. ALLEN, M.D.

INDIANAPOLIS

Why do surgeons get such a variety of results when there are so many surgical methods and tools to select from? There is some substantial cause for every variation and it is our duty to find this cause and correct it if possible.

A critical study of bone and muscle surgery has unearthed so many errors in anatomical and surgical and instrumental mechanics that it

*Presented before the Surgical Section of the Indiana State Medical Association at the Muncie session, September, 1922.

seemed advisable to organize the Surgical Engineers' Association for the purpose of investigating the subject on a larger scale.

The detection of errors at first was merely a hit-or-miss pastime. Later it became necessary to devise laws that would accurately and promptly enable one to discriminate between right and wrong. Finally the profusion of errors became so abundant that rules for their classification had to be made. In every branch of our profession there still remains an abundance of uninvestigated matter for pioneer work by men who care to improve themselves and their specialties.

In searching the cause of variation, surgery was resolved into its component parts, namely, anatomy, surgical instruments and splints and surgical methods. Each part was then carefully examined and analyzed. It soon became evident that the majority of surgical cases had mechanical origins, involving mechanical parts of the body. They are treated by mechanical instruments and mechanical splints and are held in mechanical positions for mechanical purposes. Every surgical move and every surgical use of energy is derived from the exact science of mechanics. Since surgery is so overwhelmingly indebted to mechanics and is so evidently founded upon it, the Association will devote a large part of its time to mechanical topics. Fortunately surgery is chiefly concerned with the most simple and elementary mechanical topics and devices. In the little toys that children play with we find the single and double inclined planes and spiral planes in the form of screws. There are also springs and elastic devices and resistance posts and levers and cams and weights and pulleys and toggle joints and positive and negative pressure devices involving hydraulic and gaseous properties and many other primary mechanical affairs upon which surgery is founded. Each of these items found in children's toys is under absolute control of the unalterable laws of physics and is derived from the exact science of mechanics. Each one of these laws or principles is just as good and just as unalterable as any other, but it does not follow that they are interchangeable, nor can they be carelessly selected to perform exact duties.

For example: The man who invented hitching posts for horses knew that adequate resistance to motion was a desirable form of energy to hold a horse in one place as long as his master wanted him held there. He did not think it advisable to tie the horse to one end of a rope with the other end passing over a pulley and fastened to a weight down in a deep well, although the horse was strong enough to pull the weight up as often as he cared to. If it is desirable to keep a horse constantly in one place, don't employ the constant active force of gravity to pull him out of place. Just use adequate fixation energy in the form of a re-

sistance post. The motion of a horse or the motion of a cannon ball striking a stone cliff is instantly stopped and the energy of motion is instantly disseminated into other forms of energy.

When a surgeon pulls the distal end of a broken femur down as far as it belongs he quits pulling and begins holding it there with his hands. So far so good, because he used one form of energy to produce motion and another form of energy to prevent motion. But when he puts the patient to bed with a weight and pulley tied to him, then the muscles are free to pull the weight up just as often as they care to and the broken bones are free to move to and fro. We are told that the weight tires the muscles out but we are not told when it tires them out. At the end of a year or two these patients with ununited fractures can still pull their weights up as many times in an hour as they care to. But why concern ourselves with muscle activity or muscle inactivity since neither produces motion, provided fixation energy is properly employed? The reason for selecting the weight and pulley from the classified list of surgical errors was not because it was especially easy to prove wrong, but because of its popularity. Every person in this room is familiar with it. It is used in every nation and in every hospital, although no doctor, nor any mechanical engineer, has ever been able to justify its use. It is an admitted fact that it works better with babies than with other patients, but even in this use it is very inferior to fixation treatment. There is a general law, not in general use, called the "Primary Law for Treating All Fractures" that is most dependable in analyzing and determining fracture treatment. It is easily applied and easily understood if you believe that it is inconceivable for bone fragments to grow together while they are in motion with reference to each other. A more or less prolonged period of rest is logically essential to bone union. Therefore, any system of treatment that does not provide for this period of rest is deficient and any system comprising elements antagonistic to rest is worse than being merely deficient. It is wrong because a constant acting force is diametrically opposite to rest.

As it is extremely unpleasant for us to hear examples of errors wherein surgery is primarily at fault our next example will be selected from the list of errors wherein surgery has been led astray by anatomical shortcomings. No anatomy tells us exactly how the shoulder girdle is supported or suspended in any one of its many useful positions. The shoulder girdle represents a very large and important mass of bones and muscles, and we are entitled to know all the facts concerning it. In the absence of these anatomical facts, surgery is often misled by

the plausible appearance of things rather than by the actualities confronting her.

It would not be fair to close this constructive criticism of surgery and anatomy without presenting at least one specific, tangible, living example to illustrate the points made. Mr. Boone, who lives in the same city in which this meeting is held, has very kindly volunteered to serve as the example referred to. Four out of the seven bones in his neck were broken. Some were broken in more than one place. At first he was put up in the usual plaster cast that surrounds the neck and head excepting the face. The cast rested on the shoulder girdle. It was most skillfully made, and it rested on the shoulder girdle, just the way the surgical books say it should rest, but the anatomical books fail to tell us just what supports the shoulders on which the weight of the cast was to rest. No one is going to blame the doctors for doing what the books order them to do. These broken necks are unfit to endure the weight of the shoulders alone so it must be bad mechanics to increase the burden upon the broken bones by adding the extra weight of the plaster cast on top of them. As there is no time for details we may dismiss the subject by saying that from the moment this brace was put on he made uninterrupted improvement. All shooting, burning pains and all numbness have departed and the cervical deformity is completely corrected and complete range of motion is established. Why? Because the brace rested on his hips and not on the broken bones in his neck. How are surgeons going to do good work unless mechanical qualities of anatomy are made helpful for them? How are they going to have appropriate braces unless someone publishes a volume on "Bearing Areas" since these areas are just as essential to brace designing as anatomy is to surgery?

Let us now devote a little attention to the subject of anatomy. A critical study of anatomy reveals many serious omissions and much misleading information. We have just noted how helpful a few facts concerning the support and suspension of the shoulder girdle would have been to the first author who wrote upon the plaster cast treatment of broken necks. He would have told an entirely different story concerning the treatment of broken necks if he had been supplied with the anatomical facts that enter into the mechanics of support and suspension of the shoulder girdle.

A few correct anatomical suggestions concerning the support of the entire trunk would also be helpful. We are incorrectly informed that the spine rests on the wedge shaped sacrum, and we are incorrectly informed that the wedge shaped sacrum rests upon the two iliac bones. Now the sacrum is a wedge shaped bone, but the part that concerns us happens to be an inverted wedge, that does not rest upon the two iliac bones, but is suspended from these two

bones by very strong ligaments. If the big end of the wedge was up, as we are led to think it is, then increased burden upon it would tend to weaken the pelvic girdle by spreading it open and apart. But the big end is down and increased burdens upon it tightens the ligaments and draws the two iliac bones firmly and compactly against it, thereby increasing pelvic resistance in proportion to the burden imposed upon it. The creator of fossil reptiles is entitled to some credit for having good mechanical judgment, although we may be a little slow in discovering that our own pelvic girdles are merely infringements of those used by ancient, dry-land quadrupeds. Before leaving the subject of the pelvis, which is sometimes accidentally crushed in, it may be useful to know that forceable and complete contractions of the diaphragm have frequently generated sufficient pneumatic pressure to force the bone fragments out into their normal places, while contraction of the floor of the pelvis (the lower diaphragm) tends to pull the bones in at its periphery. There are hundreds and hundreds of large and small parts about which anatomy gives the surgeon no useful mechanical suggestions. But from the few suggestions they do give us it is only fair to assume that they would gladly give more provided the surgeons would tell them just what information they desired.

Let us next look into the method of teaching muscle anatomy.

Muscle anatomy and muscle function are always taught from origin to insertion. Many muscles are named according to their action from origin to insertion, although we habitually use them in the opposite way or in several different ways. For example: The "flexor longus hallucis" is used as an extensor of the great toe in every step we take. This muscle cannot drive the toe down through the concrete pavement, so its contraction results in elevating the heel, bringing the foot forward and creating the extreme position of extension with the great toe, but without moving the great toe at all. This muscle, called a flexor, aids in producing the contrary position of extension. As you go back through the foot and on up you will find that you are often more concerned with what muscles really do than with what their names lead you to think they do. There would be no harm done if anatomists told us more about this same muscle and its mechanical significance to the foot, since its tendon runs so long a course beneath the foot. The jointed bones of the feet form comfortable arches for walking, but with very slight changes they become excruciatingly painful toggle joints that exert unbearable tension in ligaments and fascia. Anatomists tell us that these two soft tissues are inelastic. They are inelastic, also they have two other unmentioned qualities of equal importance. They are

slowly ductile and slowly absorbable. In other words these tissues are adaptable.

In the past fifteen minutes you have heard only a very little of the evidence collected during a period of some years. The evidence of errors runs all through anatomy and surgery and through all surgical implements. If there was some way to present all of the evidence at one of these meetings, you would then realize and appreciate the enormous handicap in the path of substantial surgical progress. Under present conditions, with a lot of wabbling, half truths and full-fledged errors all mixed up with facts, progress in surgery is necessarily speculative.

Now the work cut out for the Surgical Engineers' Association is, first, to separate facts from errors. Their second duty is to supply facts in place of errors. The detection and classification of errors is not as difficult as it is supposed to be. The correction of errors implies a working knowledge of appropriate mechanical principles and devices. The discriminating work in the Engineers' Association apparently will make better surgeons. Their familiarity with right and wrong mechanics will enable them to make correct estimates of the merits of surgical methods, surgical tools and surgeons themselves. Their training in figuring out the exact conditions and mechanical requirements of each patient, previous to treatment, will make them valuable consultants and dependable expert witnesses in whatever locality they live. This Association is not limited to any one place or city, but will be made up of groups of doctors in different localities who are anxious to see all branches of their profession on a sounder basis. These local groups can arrange for general assemblages and at these meetings present their new and useful accomplishments. The present members will gladly assist in getting new groups started and will at all times be glad to help because a genuinely philanthropic purpose is necessarily unselfish.

The field is broad and the work is extensive. Strange to say, there exists a class who oppose radical improvement. As a matter of common knowledge, scientific progress has frequently been opposed by those most in need of its benefactions.

DISCUSSION

DR. LOUIS D. BELDEN (Indianapolis): It seems from what has already been said that there is need of some organization of this sort. The doctor invites criticism, both constructive and destructive, and he also invites any of you and anyone you know to come to the Association, where he will be glad to take up any points you may wish to bring out.

It has been mentioned that fractures are treated by so many different means, but after

all they go back to the routine. In the Association we want to take up the routine procedures, those that are sound mechanically especially, and standardize them. Those that are not sound we would like to have discussed and suggestions offered and do whatever we can to get better results. There has been confession made here today that for one reason or another we do not give proper time, nor do we have proper appliances. It seems to me a confession of that kind is bad. It is the idea of the engineers to teach those of you who will to make your own apparatus to fit each individual case, and in that way endeavor to get better results. The Association is also starting a laboratory, to which you are invited to bring your problems and work them out for yourself if you desire, or the Association will gladly work with you or for you. This will be at practically no expense to you. The whole idea is altruistic and the thing we are striving for first is the patient.

DR. WILLIAM H. WILLIAMS (Lebanon): We well recognize that every man is not a mechanic. We have some very good doctors who are poor mechanics, and these men of course will never succeed as well in handling fractures as the man who has good mechanical ideas. But the point I want to emphasize is this—that we should try to make things more practical than in the past, that we should try to use more simple methods, not depend upon methods that are handed out in the form of splints that are supposed to fit everybody. We must get away from that and learn that each fracture case is a case within itself. Then by the application of splints we will get the results we want.

I think the ball has been started rolling in the right direction here today. We must put into practice the mechanical ideas that are necessary to bring about the reconstruction of these injured tissues to the extent that we get a normal or nearly normal condition as the final result.

DR. WILLIAM S. EHRLICH (Evansville): I am delighted to know of this Engineers' Association. I feel that we have long needed it. It will be a great advantage to all of us when the Association gets together. Fathered by a man who has devised the many appliances Doctor Allen has, and who takes up these questions seriously, with the support and encouragement of many men working along the same lines, it must surely be a success.

One especially interesting thing that Doctor Allen spoke of in the paper is fixed tension. Long before I gave up general work I treated all my fracture cases, where possible, with fixed tension. So far as plaster of Paris is concerned, I do not remember ever having used it except when I was an interne in a hospital and had to use it.

My experience in 1918 was rather interesting. We had a great many cases at the front where

we did not have sufficient Thomas splints to take care of all of them. We treated them as well as we could, put them in an ambulance and sent them to the rear, and a great many of them were dead when they reached there. I am sure many of them died in great pain. The men who were put in Thomas splints reached the hospital in good condition. That means something.

I am delighted that this Association has come into being

DR. M. A. AUSTIN (Anderson): I am certainly pleased to know that we are to have an opportunity to get away from the old anatomy and physiology proposition and have some mechanics to tell us what we should do with some of these mechanical problems. I have quite a good library, but when it comes to finding out answers to some of these mechanical problems it is a matter of using your judgment, because you get very little assistance from some of the text-books of today. I certainly shall avail myself of every opportunity to attend this Association, and to get in touch with some of the newer things that Doctor Allen has worked out and seems to continue to work out.

DR. GEORGE D. MARSHALL (Kokomo): I think this is a move in the right direction. Doctor Allen I believe is often misunderstood in presenting his ideas before associations and probably incurs a good deal of antagonism that is unwarranted.

The application of mechanical principles to surgery is not easy and is not within reach of all. Whenever you speak about standardization of methods there is always a certain amount of give and take involved, and of course a man must have some mechanical education if he is to accomplish the best results. The men in the army service received a great deal better attention than the laymen because the laymen fall into the hands of practitioners who have not adequate facilities for treating fractures properly. The usual method is to cover them with plaster of Paris, tie an extension on, and leave them. And these things are upheld in our medical books. That does not mean they are right, because some of them are simply atrocious.

DR. H. R. ALLEN (closing): After working alone for years in unearthing and correcting mechanical errors in surgery, I organized the Surgical Engineers' Association. If my views are correct, others should profit by them. If my views are wrong, surely someone will be kind enough to inform me.

In order to be absolutely accurate upon mechanical matters, the ablest mechanical engineers this country affords have volunteered their aid. Our most distinguished anatomists will also help us in matters of correcting mechanical errors and important omissions in the field of anatomy.

There can be no selfish motive in an organization whose sole purpose is to put all surgery

and all surgeons on a sound mechanical basis. We do not expect large local units, nor large central units, to carry on the pioneer work that surgery needs so badly. But we do look to men like Doctor Marshall and Doctor Austin, and many others, to surround themselves with local groups who will dig out mechanical facts and contrast them with conventional fallacies.

SYSTEM AND THOROUGHNESS IN EYE EXAMINATIONS AND TREATMENT*

F. S. CUTHBERT, M. D.

KOKOMO

Success in diagnosis in ophthalmology, as in other fields, depends first upon the ability of the diagnostician and secondly upon a faithful observance of a definite, systematic, routine examination, which should be second nature to us, using all the various methods of examination, one after the other, in their proper order.

Owing to the ease with which both the exterior and the interior of the eye ball can be seen, the great majority of its external as well as its internal alterations and diseases can be determined with absolute certainty, usually at the first examination. Those cases in which the diagnosis must be confirmed or corrected by observing the course of the disease, or effect of treatment, form a small minority, and in only a very few disease processes is the true interpretation obtained from autopsy.

Nevertheless the practice of ophthalmology, if based on the proper recognition of disease, is by no means without its difficulties. The physician is confronted and perhaps misled by a multitude of processes differing but slightly from each other, by a rich variety of clinical pictures, and by the difficulty of recognizing many important pathological conditions in the eye, either because the lesions to be looked for are very small, or because they are apparently unimportant or they present well nigh imperceptible deviations from the normal.

To this diversity of phenomena, on the one hand, and to the extraordinary demands on the observer's eyesight on the other, must be attributed the many cases of mistaken diagnosis, which in spite of the ease and clearness with which both the exterior and the interior of the eye can be seen, unfortunately occur in this as in other branches of medicine. The most deplorable result of such diagnostic error is blindness, which occurs only too frequently, as for instance in cases of glaucoma.

It is therefore important for the student of medicine to familiarize himself as much as possible with ophthalmology, for he should realize

(*) Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the Muncie Session, September, 1922.

that it is as vital a branch of medicine as surgery or obstetrics, for to many people blindness is as great a calamity as death itself.

Great demands are made upon the examiner's eyesight in the study of ocular affections and equally as much in the actual practice of ophthalmology, therefore it is most essential that the visual apparatus of the observer be near normal to do good work. It is only with the greatest difficulty that the examiner suffering with marked astigmatism will see the most essential points in a fundus examination, or even in examining the exterior of the eye he will be outstripped by his competitor that has good eye-sight. The essential points may escape him altogether.

All textbooks on diseases of the eye give about the same order of procedure to be followed, but few of us follow it. When a patient presents himself, the one thing we almost invariably do is to elicit from him an expression as to what he is complaining of, such as a scratching of the eye lids, an epiphora, a headache, a discharging eye, or a failing vision, and then we immediately proceed to examine for the probable cause which is uppermost in our mind for such complaint. It is quite proper in many cases that we should concentrate immediately upon the probable source of trouble that has brought him to us. If our snap judgment is correct we give quick relief, but we too often may pass by much that is very interesting to the close observer and occasionally will miss the mark entirely. Later we will have to face the very embarrassing news that the patient failed to get relief and sought elsewhere with entirely satisfactory results, and was very much impressed with the careful, painstaking, systematic examination he received at the hands of a brother competitor across the way.

At this point I would like to be a little bit personal and mention the name of my preceptor, Dr. Bernard Samuels, of New York City. Dr. Samuels always took a delight in getting every patient into the dark room and by oblique illumination search the cornea for opacities, estimate the depth of the anterior chamber, examine the crypts of the iris, remarking that this patient has an unusually broad margin of the posterior surface of the iris showing at the free border, or finding specific nodules of syphilis which tell a vast story. If there was a slight haziness of the lens it never escaped his notice. Many slight opacities of the vitreous were discovered which apparently were not disturbing the patient. In elderly people he was always on the lookout for increased tension, arteriosclerosis, and retinal hemorrhage. In a routine examination it is needless to mention that we should not neglect to take the personal history and in case of grave import as a precaution against

omission, we should follow a chart setting forth the order of procedure as follows:

Name and residence; date; age; occupation; family history; personal history; habits; organs of digestion—teeth, tongue, stomach, bowels; organs of respiration—nose and accessory sinuses, throat and lungs; organs of circulation; kidneys; abdominal organs—liver, spleen; organs of generation—menses, leucorrhea, uterine diseases; nervous system—intelligence, hysteria, sleep, vertigo, gait, tendon reflexes, paralysis, tremor, pain, convulsions, headaches and their positions. To the one who does superficial work, the above may seem unnecessary, but may I state at this point that a boil or hemorrhoids may be complicating a corneal ulcer which might escape our attention if not elicited and continual reinfection will give our patient a blind eye.

Briefly the first thing I do is to—

1. Take the naked eye vision, always the right eye first.
2. Then if not 20/20, I get the pin-hole vision.
3. Next the patient goes to the ophthalmometer for the astigmatism.
4. Following this comes the manifest refraction.
5. Next I roughly estimate whether the patient has binocular vision by putting on a plus 10 prism, base down in front of one eye and have the patient look at the light across the room, or I may use the Maddox rod on one eye and the red glass over the other eye.
6. Then I take the fields for form and color.
7. Lastly I go over the conjunctiva and sac.

Next comes inspection—good daylight without instruments. a. Cornea; b. anterior chamber; c. iris and pupil; d. take the tension, with fingers if real soft or very hard, but use tonometer if uncertain; e. dark room—1. using ophthalmoscope with +20 to see as far as posterior chamber; 2. +16 for lens inspection; 3. +8 at close range for vitreous; 4. inspect retinal field. Divide it into nine squares. Look for the white line on retinal arteries. If plus lenses are required to bring them out clearly our case is hypermetropic and if minus lenses are needed to outline the white line clearly our case is myopic.

8. If it is a case for homatropine, I use Wyeth's ophthalmic discs No. 342. I usually instill one drop of 4% cocain in each eye and after a brief wait I place one disc in each eye; and in fifteen minutes I repeat with a second disc in each eye if the patient is young, between fifteen and thirty-five years of age. I have the patient keep the eyes closed a full hour. I always test the patient with the large type of the near card to see if accommodation is paralyzed. If there is any question about this, I may use a solution of homatropine once or twice. In

myopic eyes of over minus 3.00 dioptres I never use a cycloplegic in refracting. In elderly people I am always on the lookout for increased tension, arteriosclerosis, or retinal hemorrhage.

9. Now I take the vision again if it is a question of glasses, first, naked vision, then pin-hole.

10. Then I do a retinoscopy. At this point I wish to state that if we would use our reinoscope as faithfully as the general practitioner uses his stethoscope, fewer mistakes would be made.

11. In proving up with the trial lenses, especially if I fail to get 20/20 vision, or 20/15 vision in a hyperope, I place in front of the correction in rotation, plus .50 sphere, plus .50 cylinder axis 90, plus .50 cylinder axis 180, minus .50 cylinder axis 180, minus .50 cylinder axis 90, minus .50 sphere. If any addition is acceptable I then go over the same routine with .25 and then with .12.

May I state at this point that I find the pupillary diaphragm very useful in proving out where a cycloplegic has been used.

In regard to solutions, I use everything good and plenty. If I want to break up posterior synechia, I keep the patient almost the entire morning, instilling from time to time atropine, homatropine and cocain, one right after the other. I have never seen any bad results from this. In glaucoma, to make the pupil smaller, I keep the patient the same length of time, using a solution composed of eserine 1%, pilocarpine 2%, and dionin 5%. In addition I massage the eyes and instruct the patient how to do likewise at home.

In regard to the conjunctiva, whatever I do is done rather heroically. Not one drop of anything but usually many drops. I almost douche, I might say.

I also am fond of employing, in ordinary conjunctivitis, the glass rods, and teach the patient what is termed the palming exercise, namely, to cover the folds of skin under the orbit with the palm of the hand and massage the whole orbit in all directions.

Personally, I endeavor to do something for the patient myself, not being content simply to send him to the drug store to buy a salve or drops. It seems to me that one good treatment from the doctor is worth more than the patient can have done for him in several days at home.

If a patient comes to me with symptoms of a foreign body in the eye, and I fail to locate the trouble, even with the aid of fluorescein, I apply antiseptics and a bandage and instruct the patient to return the following day. We should never tell the patient we are unable to locate the trouble. If the patient is not relieved, the cause will in all probability be evident at the next examination.

In conclusion I will state that there is a tendency on the part of some of us to let ourselves rest on the oars and thus degenerate into just mere glass fitters and not very good ones at that. The propaganda circulated before the laity by the optometrist against the use of "drops" in the eyes has so cowed some of us that we waver in using a proper cycloplegic in instances where we absolutely know that we will get no better results than the optometrist by neglecting their use.

There is an over-specialization in America as far as the pseudo-specialist is concerned, but under-specialization of real specialists. There is too much of a tendency for the nurse to make the diagnosis and the specialist to operate, and I believe the patient would fare better if the specialists would do the diagnosing and let the nurse operate. We should be taught so thoroughly that we will get a restoration of the eye once an operation has been done, and should not be taught so much destructive surgery. We should have at our command a good laboratory where we can get a report on spinal fluid, blood and urine, which is absolutely necessary in some cases. We should strive to receive an internship in one of the real hospitals of our country, and build soundly on micropathology, anatomy, histology, and, last but not least, physiology of the eye.

DISCUSSION

DR. W. A. HOLLIS (Hartford City): The doctor's presentation resolves itself mainly into a consideration of refraction. The routine outlined is very good and probably meets his present needs, but we all have to modify our methods of examination from time to time and do that which seems necessary to accomplish good results.

I do not like the term "absolute" routine. I would rather use "thoroughness." The doctor makes the statement that there are diversities of phenomena, and this is all the more reason, it seems to me, why there should not be an absolute routine. Very early in my practice I tried to follow out text-book routine, but could not make it fit. We all eventually develop a systematic method of making our examinations, but the only routine followed is the very preliminary part of the examinations.

The Doctor speaks of the emmetropic eye as an advantage in thorough and reliable work. I congratulate him on having such splendid eyesight. I am the unfortunate victim of a high degree of hyperopic astigmatism $+1.50 = c + 1.50$ ax. 90° in the right eye; $c + 2.50$ ax. 90 in the left, which gives a vision of 15/10, and I find it very reliable in my ophthalmologic work. What the doctor meant was to correct the astigmatism of the examiner and in that way get good working vision.

As to history-taking, I do not like the outline of history cards. For my purpose I find a plain card better. It has the date, name, age, etc., and I stop with that and put in whatever is necessary. A history loaded down with negatives is absolutely worthless. Concentrating on the probable source of the trouble, as the doctor says, is more important than following a definite chart routine. Doctor Jackson we all know is a man of absolute simplicity and thoroughness, and believes everything should be done to avoid ambiguity. He made the statement before the American Academy of Ophthalmology and Otolaryngology at Minneapolis that "The important thing in making a diagnosis is to arrive." There are many ways to do this, but the short cut with positive lines leading a definite diagnosis is the one to choose.

As to posterior synechiae, I do not have good success in relieving old posterior synechiae. The only success I have had is to prevent them.

DR. G. W. SPOHN (Elkhart): I enjoyed the paper very much from the standpoint of thoroughness. I am a slower worker than Doctor Cuthbert, and not so thorough. I imagine the doctor was educated in Germany by the histories he takes. I am reminded of a case I saw in the Vienna clinic. An American came in with a little boy who had enlarged tonsils and adenoids and earache. The patient needed attention then and there, but the German habit of slowness (they prefer "thoroughness") demanded another day for final diagnosis. The doctor did not even take the temperature. He asked the patient about a dozen questions and told him to come back next day. Any American physician would have found out all the clinical symptoms and arrived at proper conclusions in less than thirty minutes. The next day the Vienna doctor looked the boy over and went into the history of the case. He did everything in the way of examination—blood, feces, urine, and all that. I asked him, "What is the use of doing all that for the child?" and told him what the trouble was. He said, "That is the way with you Americans. You jump at conclusions, whereas we Germans are very slow to form opinions."

DR. GEORGE F. KEIPER (Lafayette): May I refer to some of the newer apparatus for the examination of the eye? The slit lamp of Gullstrand with the corneal microscope is a wonderful help because we are able to see things invisible to the unaided eye. It is really the application of the microscope to the living eye. The stereocampimeter enables us to measure the blind spot and to map out scotoma in the fields of vision with both eyes open, which is a distinct advance over the older methods where the eye not under examination is occluded. The examination of the eye and its interior with the

red-free light is most interesting and instructive.

I wonder how many of us in our refraction work use the cross cylinder of Edward Jackson, both in verifying the correction before the patient's eyes as well as getting the correct axis of the astigmatism of the eyes? The set is composed of three combinations: the plus and minus .12 D at right angles; the plus and minus .25 D at right angles, and the plus and minus at .50 D at right angles.

Atropin drops alone may prove ineffective to break up synechiae. If so, give the patient one-half grain of calomel with three grains of quinine every three hours until the bowels move freely, or until six doses are taken. If the bowels refuse to move two hours thereafter, then a dose of castor oil or salts must be given, and unless the synechiae are old ones the pupil will spring wide open after such a cleaning out of the bowels. Why? Because by that process the patient is relieved of the toxins in his system which are producing the damage to the inflamed eye. Our fathers called this revulsive action.

As to record taking, or case taking, I regret to find myself at variance with Doctor Hollis. Of course it is unnecessary in many cases to use the entire form, and maybe we desire to record more than the sheet will hold, but if you have an assistant to whom you entrust the preliminary examination, a printed form had better be used. It saves much writing and it tends to a healthy routine, if I may speak of it in that way.

DR. ALBERT E. BULSON, JR. (Fort Wayne): System and thoroughness in eye examinations and treatment are necessary in order to insure the highest degree of success. It is questionable if the essayist carries out in every case the routine he mentions, for if he does he wastes a good deal of time upon unnecessary procedures and he sees but a few cases during his working hours. Undoubtedly too many men are too superficial in all of their work, and, in consequence, they fail to do either themselves or their patients full justice. It is the well trained ophthalmologist who is able to determine how exhaustive the examination should be. For instance, not every case requires complete refraction, muscle tests, color tests, fields of vision, Wassermann, urinalysis, blood count, examination of smears, and other procedures included within the scope of an exhaustive examination, but the trained observer should be able to determine in the average case what procedures are indicated in all their thoroughness. In my own experience the most valuable feature to me in determining the scope of the examination required is the clinical history, and while it need not require an unusual amount of time in

the taking if the patient's garrulousness can be controlled, yet it should be thorough and bring out the salient points pertaining to the symptoms and manifestations presented and possible cause for the same. The point I wish to make is that if all indications seem to point to the fact that the case is one of refraction, then it is a waste of time and an added expense to the patient to subject him to some of the things that are required for pathological conditions. On the other hand, a case of hemorrhagic retinitis for instance will not be given appropriate attention if nothing but the refraction is considered, or if the aid of urinalysis and blood tests are omitted. Many men make not only superficial and insufficient examinations, but they even are superficial in the procedures which they attempt to carry out. If it is a case for glasses only, they fail to put into practice those procedures that experience show to be absolutely necessary if the best refraction work is to be done. On the other hand, if it is a case of pathology, they fail to take advantage of the findings that could be obtained by making use of the laboratory and other means that afford definite findings. The point is well taken that thoroughness is necessary, but thoroughness should be coupled with some discrimination in the selection of cases in order to avoid doing that which is superfluous, but not omitting that which is absolutely necessary.

DR. F. S. CUTHBERT (closing): I must confess that I do not follow this detailed system with every case, but we should all have some system like this and make use of it when needed. When I have a case for refraction I follow that part of the scheme, and do all my refraction that way.

Doctor Hollis referred to the fact that too many negatives is not best on a history sheet. I make note of positive findings only and disregard negatives entirely.

I did not take any training in Germany, but feel I have had as good or better training right here in America.

I have an ordinary blank card on which I record the name, age, occupation, etc., of the patient, and if it should be a case of corneal ulcer I take up that part of the systematic examination that bears on corneal ulcer. I give the patient relief and let the rest of the scheme alone. If it is necessary to take the field of vision in a case of glaucoma, I do that.

My object was to get the opinions of others, and to emphasize the fact that we miss things when we do sloppy work.

DRAINS AND DRAINAGE OF THE ABDOMINAL CAVITY

M. L. CURTNER, M.D.

VINCENNES

Drainage of the abdominal cavity dates back beyond the history of abdominal surgery in that the abdomen was drained by the use of a trocar in acites and anasarca before the surgical age. I find no report in the literature of adhesions after this kind of drainage. From experience we know that after the removal of the trocar from the abdomen the drainage continues for several days. I have known the lower abdomen to be punctured in this manner several times without any dire results.

It is an established immunological fact that the pelvic peritoneum has the ability to combat infection and destroy the same far better than parietal peritoneum.

In the pelvis, including the area of the appendix, it is surprising, to anyone who opens the abdomen, the extent of adhesions following infection and acute inflammatory process of the pelvic peritoneum. We know that within 24 to 48 hours the belly will wall off an appendiceal abscess or a ruptured tube in the pelvis of a woman. We also know that sometimes these patients recover without surgical assistance (however, the mortality is very high) by an absorption of the pus, or a spontaneous rupture and drainage through the gut, vagina or abdominal wall. May I ask what becomes of the adhesions in these cases?

Being prompted by my experience in some of these cases I wish to report the following experiments on guinea pigs, with various kinds of drains. I do not wish to draw definite conclusions from the small number of my experiments, but rather make this in the spirit of a report of my findings and request further comment.

Guinea pig No. 1: The abdomen was opened and a gauze drain was introduced into the lower abdomen. Said drain was removed within twelve hours; the abdomen opened, examined and closed. I found very slight adhesions of the small guts. This guinea pig died of pneumonia (as I keep them in a box in the back yard) and upon opening the abdomen I found the adhesion had disappeared.

Guinea pig No. 2: The abdomen was opened and a rubber tube introduced into the lower abdomen. Twelve hours later the tube was removed; the abdomen opened and examined. I did not find so many adhesions as in guinea pig No. 1, but more of an inflammatory area. This may have been due to an introduction of infection with the introduction of the tube into the abdomen—(however, all of these experiments were carried on under aseptic surroundings).

Eight days after the examination of the abdomen the guinea pig was killed, the abdomen opened and I did not find any adhesion or evidence of infection.

Guinea pig No. 3: Abdomen opened and a rubber tube placed in the lower abdomen and sutured to the skin. Forty-eight hours later the tube was removed, the abdomen reopened and examined. I found the tube to be completely walled off by adhesions, forming a sinus. No infection was present. This guinea pig was killed in eight days after the examination, the abdomen opened for the third time. I found the small intestine adherent to the peritoneum at the site of the incision, or rather the point in the incised scar where the rubber tube had been stitched into place, which was the external opening of the sinus upon removal of the tube.

Guinea pig No. 4: Abdomen opened and a gauze drain placed in the lower abdomen. Forty-eight hours later the abdomen was reopened and examined. The gauze drain was completely walled off with a sinus formation, the same as in guinea pig No. 3. No infection present. This guinea pig was killed eight days after the examination, the abdomen reopened, and I did not find any adhesions as in guinea pig No. 3.

Guinea pigs Nos. 5, 6, 7, 8, 9 and 10 were experimented on the same way as 3 and 4, using the gauze and rubber tubes. The drains were left in the abdomen in guinea pigs five and six for sixty hours, seven and eight for seventy-two hours, nine and ten for eighty-four hours, respectively. The results I found in these guinea pigs were the same as in experiments Nos. 3 and 4.

The result of this experiment led me to try the following: A boy, aged 12 years, operated for a pus appendix—proven after the abdomen was opened. The diagnosis was made first by Dr. C. E. Stewart, of Vincennes, Indiana. The appendix and pus were removed and the wound sutured in the ordinary manner. The patient was placed on his right side and the head of his bed raised by the use of blocks. The wound began discharging pus on the third day, which

was dressed with alcohol and gauze in the customary manner. This patient was dismissed by me as well twenty-eight days after the operation. Two years have passed since I dismissed this boy as well, and during that time he has not complained to me of pain in his side nor has he developed a post-operative hernia, one of the bugbears of the surgeons.

A woman, aged 32, diagnosis bilateral pus tubes (made by Dr. Boyd of Vincennes, Indiana.) Patient was operated, using the transverse incision. Pus tubes were found; one tube was ruptured during the removal. This wound was sutured without drainage. On the fourth day the wound discharged a serous fluid which lasted a few days and stopped. Patient discharged as well twenty-one days after the operation. It has now been more than two years since this case was operated and she has not complained to me of pain in the pelvis or scar.

These two cases I see every few days, and I am sure that they would take the trouble to tell me if at any time they were having any pain about the field of operation. I am only reporting two cases as my others were just repetitions of these two.

My conclusions derived from these experiments are: First, the pelvic peritoneum has a wonderful ability given to it by nature to overcome infection. Second, pus follows along the line of least resistance and when formed in quantity within the abdomen will come out the sutured wound and form a sinus. Third, drains introduced into the abdomen act as an irritant, cause adhesions to be formed and increase the possibility of post-operative hernias. If drains are walled off in forty-eight hours and less, would they be of much benefit in drainage of pus from the abdomen after that time? Fourth, the gauze and rubber tube were both walled off in forty-eight hours, but only in the rubber tube did I find an adhesion of the small gut to the peritoneum eight days after the removal of the tube or drain.

Thus it seems to me that drains can be used too freely in the abdomen and left in too long.

THE PRECIPITIN REACTION OF THYROGLOBULIN

The antigenic properties of thyroglobulin were studied by Ludvig Hektoen and Kamil Schulhof, Chicago (*Journal A. M. A.*, Feb. 10, 1923), and it occurred to us that it would be of interest to study them. They prepared thyroglobulin from beef, swine and human thyroids in the usual way, but with special efforts to obtain as pure a product as possible. The results of this work indicate that human thyroglobulin, prepared as described, contains a main, strictly

specific antigen and also lesser antigens that in the rabbit may call forth precipitins for thyroglobulins of other species. The beef and swine thyroglobulins used in these experiments acted as strictly specific antigens.

A case of respiratory paralysis with alarming symptoms occurring in connection with the use of quinidin sulphate in the wards of the Boston City Hospital is reported by Reid in the *Journal of the American Medical Association*, December 9, 1922.

**THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION**

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

Office of Publication, 406 W. Berry St., Ft. Wayne, Ind

MAY 15, 1923

EDITORIALS

**THE WASSERMANN AS A BASIS OF
TREATMENT**

Much has been said concerning the danger of treating the positive Wassermann reading instead of the syphilitic patient, and this has led to an editorial discussion of the subject in the April number of *The United States Naval Medical Bulletin*. The writer points out the fact that in the first burst of enthusiasm following the diagnosis of syphilis by the Wassermann test and the use of salvarsan, we thought we were able to cure early syphilis with mathematical precision, and with the Wassermann reaction to guide us we felt secure in our treatment. Therefore, the object of treatment became an assault on the positive Wassermann reading instead of an attempt to deal with syphilis as a morbid condition, and even at the present time the tendency is to trust almost entirely to the Wassermann reading as a control of treatment. Thus a typical present day standard of cure demands a negative Wassermann reaction for at least a year in both the blood and cerebrospinal fluid, and this should continue negative after a provocative injection of arsphenamine. In other words, we aim to treat the patient until the Wassermann reading remains permanently negative. Attention is then called to some recent opinions expressed by well known syphilologists concerning the cure of syphilis, and the point made that the Wassermann reaction, while giving valuable diagnostic information concerning syphilis, it also is subject to many sources of error and therefore should be considered an empirical test.

The point can not be emphasized too much that the only information upon which the efficiency of the Wassermann test can be determined is obtained by clinical observation. The Wassermann test is neither infallible nor specific, and its value is greatest when its fallacies and limitations are appreciated fully. "In spite of exhaustive modern treatments we find that active symptoms are liable to occur and recur at any time throughout the latent period of the disease, that the Wassermann reaction may vary from negative to positive and again to negative

at intervals without warning or apparent reason, and that certain patients whom we are unable to classify or identify possess an inherent potentiality to become tabetics or paralytics."

The conclusions reached are that a negative Wassermann reading should be interpreted with caution and reservation, and the importance of many subsequent examinations appreciated, and, furthermore, that it is not rational to consider a certain number of inactive readings over a certain period of time as a standard of cure. A positive reading in itself is not a harmful condition. By treating the individual patient instead of treating the Wassermann reaction we can do much more for him than by merely turning his positive Wassermann reading into a negative one.

**THE MERIT OF KOLMER'S TECHNIC IN
THE SEROLOGICAL DIAGNOSIS
OF SYPHILIS**

Much discussion has been indulged in concerning the specificity of cholesterinized antigens in the serological diagnosis of syphilis and it is very evident that a concerted opinion as to reliability of complement fixation technic is needed. The only means whereby such an opinion can be materialized seems to be by the collection and analysis of data concerned with the establishment of the reliability or non-reliability of cholesterin plus reactions as a serological indication of syphilis. In a recent article on this subject by Kilduffe in the January number of the *Journal of Laboratory and Clinical Medicine*, the complement fixation technic recently proposed for standard adoption by Kolmer is considered and with resulting conclusions as follows:

1. That the Kolmer modification possesses great delicacy.
2. That insofar as the study of a series showed, false positives did not occur.
3. That while, because of factors inherent in and concerned with the formation or production of syphilitic reagin, the method was not infallible, occasionally failing to detect its presence, the occurrence of a positive reaction by this technic constitutes very strong presumptive evidence of the presence of syphilitic reagin almost invariably, when evidence was obtainable, corroborated by clinical and other findings.

According to Kilduffe, Kolmer's antigen from the standpoint of delicacy and specificity is far in advance of any other antigen. His investigation covered the serological examination of over a thousand serums and led to the conclusion that a positive reaction by the Kolmer method constitutes very strong presumptive evidence of the presence of syphilitic reagin, though the same degree of reliance cannot be placed in a single negative reaction by the Kolmer or any other technic as indicative of the

absence of any other syphilitic reagin. In fact, Kilduffe insists that more than one negative reagin can be reasonably maintained.

The recommendation is made that the collection and analysis of a still larger series of reactions is necessary in order to place the question upon a sound and agreed footing.

SOCIALIZING OUR STATE LABORATORIES

A few weeks ago some of the medical laboratory workers of the State entered a protest concerning competition of the State laboratories and especially the practice of rendering services gratuitously to those amply able to pay. The work done by the State laboratories has been broadened to such an extent that at present it is possible to obtain any kind of laboratory investigation performed, including bacteriologic and pathologic as well as chemical examinations. That this work is of inestimable value as an aid in carrying on public health activities no one will question. On the other hand, there is not the slightest doubt that the performance of much of this work, at the expense of the State, has been the means of encouraging a species of dependency and loss of self respect on the part of those individuals who have no right to expect something for nothing, all to the ultimate end that we are drifting toward paternalism.

The protest on the part of laboratory workers might well have been backed up by the medical profession at large, as it was a dignified and consistent argument in favor of changing the policy followed by the State Laboratories. In response to this protest the State Board of Health has issued an announcement, published in this number of *THE JOURNAL*, which will bear careful analysis. The first thing that strikes us is the statement that the laboratories "should contribute in every reasonable way not only to the prevention and control of communicable diseases but to the protection and preservation of public health *and the prevention of unnecessary illness of any kind.*" (Italics ours.) Here is found an argument on the part of the State Board of Health that there is no field of medical investigation to which the State should not contribute, and they further state that "by no reasonable interpretation of the law can the work of the laboratory be restricted to indigents or to those who are unable financially to pay the usual charge for laboratory services." Undoubtedly there have been abuses of the State laboratory, for it is admitted that specimens are accepted by the laboratory for examination without question when submitted by physicians of the State of Indiana and, as charged in the protest filed with the State Board of Health, there are physicians who not only have taken

advantage of the gratuitous services at the hands of the State and given their well-to-do patients the advantage of that gratuitous service, but a few have accepted the gratuitous service and then charged the patients for it.

We are not in sympathy with the widening of the field of activities of the State Board of Health when such a process contemplates or actually carries into effect the rendering of a gratuitous service that is not deserving and which has the distinct tendency toward pauperization of the people. We admit the justice of the claim that our public health department should do everything possible for the eradication or control of communicable diseases, and perhaps the limitations are not well defined, yet the idea of furnishing gratuitous laboratory services to any but indigent poor and in direct competition with physicians who are prepared, at great expense of time and money, to do this work, is not in keeping with our ideas of justice or the principles under which our government is founded. As well might the State furnish our plumbing and lighting, or anything else that makes for the comfort, happiness or health of the people. If we are going to have a socialistic or paternalistic form of government, why begin with medical service? The plea made by the secretary of the State Board of Health that no question is to be asked when work is demanded of the State Laboratories is a poor answer to the protest made by the laboratory workers, and if that rule is to hold true in business we might as well refuse to ask any questions concerning anything that is offered us, whether the same is honestly obtained, and offered in good faith or not. As a matter of fact the State Laboratories do have a right to ask questions when specimens are submitted for examination, and because the majority of the physicians of the State are honest is no sign that all are honest, and the laboratory should be protected from imposition.

As we have said before, and say again, public health officials gradually are taking over the duties of the private practitioners of medicine, and unless there is a change in the program the practice of medicine eventually will fall into the hands of public officeholders with a medical degree attached to their names—bureaucratic medicine. When that time comes medical progress stops—as also does efficiency and service.

THE UPLIFTERS ASSIST CHIROPRACTIC STUDENTS

The regular practitioners of medicine are asked frequently to donate services and even money to supposedly worthy individuals deserving of charity, and seldom if ever fail to respond favorably to the request that is made. Usually these solicitations for aid come from

charitable or benevolent organizations of one kind or another but sometimes they come from self-appointed uplifters, mostly women, who desire to get into the limelight some way and are content to rest their case with one or more charitable or benevolent enterprises with which they are identified.

Recently the editor of *THE JOURNAL* has had an illuminating experience which not only shows the inconsistency displayed by some of the uplifters but the danger of it to society as a whole. A woman, prominent in benevolent work, solicited aid for a blind man, and during the course of the conversation it developed that the blind man was earning something as a peddler but that it was desired that he should pursue some more profitable vocation and, in consequence, the benevolent organization was trying to raise money to pay for a chiropractic course for him. It also developed that the uplifters had helped other blind men to take a chiropractic course and become chiropractors. It was even stated that numerous benevolent and charitable organizations actually were paying, in whole or part, the regular chiropractic graft required in order to secure a chiropractic diploma, and the amusing feature in connection with the whole matter was the statement that regular doctors along with others had contributed to the cause. When it was suggested that the various uplift societies should be encouraged in aiding any persons to acquire knowledge and experience that will enable them to follow an honest trade or profession but that chiropractic practice could not be included in the category, the well-known argument of the chiropractic colleges was advanced which, in effect, is that "there is good money in chiropractic". The suave female lifter was advised that there is good money in bootlegging and that bootlegging is just as honorable and just as much within the law as chiropractic practice. She seemed quite distressed when it was suggested to her that the human body is the finest piece of mechanism ever created and there is no reason for permitting anyone to tamper with it unless he has a knowledge of that mechanism and the various things that impair or alter its operation, any more than she would turn over a fine Swiss watch to an umbrella mender for repair.

However, the experience only indicates to what lengths this craze for uplift work will go when it is taken up by a lot of women who have few responsibilities and are seeking some outlet for their pent-up desires to be known as doing something for the betterment of the human race. The question might well be asked, how many of us have been contributing to the so-called training of chiropractors and aiding the chiropractic graft upon solicitation of benevolent or charitable organizations for donations? On the other hand, did you ever hear of a chiro-

practic so-called "school" that made any donations or concessions to blind people or others when it came to collecting the fancy fees that regularly are charged for the so-called chiropractic training?

THE NEED FOR A STATE HEALTH COMMISSION POLICY

What the scope and extent of work of our state and local health officials should be is a subject that is of intense and vital concern to the medical profession. This concern is becoming more grave in the light of facts that indicate an aggressive movement and activity on the part of health officials to enlarge their field of activity. They are no longer solely concerned themselves with the problems of health and disease prevention. They are openly and with increased avidity engaging in the actual practice of treating patients and do not limit their work to the indigent of the state or community.

The profession, individually and collectively, must concern itself with this problem. We cannot remain inert while these aspiring officials under the guise of health conservation, "Saving Human Lives," "Saving Mothers and Babies," and similar catch-line and appealing phrases insidiously extend their efforts to fasten upon state and society their plans of socialism and socialized medicine. Our lethargy has continued too long. The time is at hand for a definite and forceful declaration of our position and such activity as will be necessary to halt this aggression.

We are in full sympathy with activities that are limited to the features and problems of health. We are not in sympathy with those activities in which the state, through health officials, enters into competition with practicing physicians in the diagnosis or treatment of cases which have no direct bearing upon the health or welfare of the community.

We support the proposition that the state should care for its mental and moral defectives and its indigent sick. We unqualifiedly condemn and protest against the socialistic efforts of state health officials and municipal health officials to force the expense of private health upon the taxpayers under the guise of public health.

We commend the establishment of free clinics for the treatment of tuberculosis, mental hygiene, venereal and other diseases of the indigent sick, but for *no other* than the *indigent*. We also commend and support efforts by health officials to recognize and properly to safeguard all cases of diphtheria, typhoid fever and similar contagious diseases. The recognition of open or communicable stages of venereal diseases and

tuberculosis may logically be considered a public health problem.

The performance of the Wassermann test, for public institutions whose inmates are wards of the state, cannot be criticised. We do maintain that this test should be made by our state laboratory only for these institutions and for the indigent.

The various routine examinations of sputums, urines and feces, the diagnosis of tissues from surgical cases and from autopsy examinations and making of microscopic and other examinations of bloods must be regarded as a direct and uncalled for invasion of the field of diagnostic medicine. Such examinations are not an aid in any way to the enforcement of public health measures. The state, in making such examinations, at once enters into competition with physicians and at the same time pauperizes the patients at the expense of the taxpayers.

The above are but some of the instances wherein the state, by reason of the plans and activities of its health officials, and not by reason of public needs or demands, is invading the field of medicine and engaging in the practice of medicine. They are by no means limiting their work to the indigent or state wards. Unrestrained and unprotected you may confidently anticipate that these officials will reach out to greater efforts and ere long establish the baneful state of socialized medicine. The need exists for an investigation, the formulation of a policy and the enforcement of that policy so that a rational interpretation of the function of a state laboratory and state health department may be defined, and, if necessary, incorporated in a statute.

A policy which makes it possible, even invites, physicians to benefit from public service at the expense of public funds is indefensible and demands revision. Evidence is at hand that specimens are sent to the laboratory from patients who can and do pay and these examinations are made free by our state laboratory. Evidence also is at hand that physicians sending these specimens do collect fees from patients for these examinations that the state makes without fee or cost to the doctors. The records will show that a huge volume of Wassermanns and other examinations are being done for private patients at public expense.

The question is, what are you medical men going to do about it? Are you going to sit idly by and permit such a policy to continue? Are you unconcernedly going to allow one or a small coterie of health enthusiasts in state and municipal employ to formulate and apply a policy of state practice of medicine? Or, are you going to bring this matter to an issue now and terminate the present situation?

We are firmly of the opinion that within the very immediate future a conference composed of representatives from each county society should be called at some central point. That the situation should be thoroughly canvassed. That a policy should be adopted and then that our organization as a whole should, with enlisted support from outside agencies and individuals, make such presentation and impell such action as will bring about the abatement of some of the present practices that are being engaged in by our health officials. We believe that the calling and arranging for such a conference should be undertaken by our committee on Civic and Industrial Relations in conjunction with the Council. What is your opinion, we ask you?

(The above is a reproduction of an editorial appearing in the April number of *The Journal of the Michigan State Medical Society*. It applies to Indiana as well as Michigan and therefore is offered for the consideration of the members of the medical profession of this State.)

ANTI-VIVISECTIONIST SCIENCE

To the few physicians who troubled to hear the addresses of Dr. (save the mark) Walter R. Hadwen, when he lectured on antivivisection in this country, no comment is necessary as to his complete disqualification to speak on any scientific medical subject. For the vast majority who, of course, did not trouble to listen to the maunderings of this ancient spokesman for the antivivisection cause, the following quotation from the *Starry Cross*, published under the auspices of the American Antivivisection Society, will accurately define his knowledge. He was asked:

"What do you advise for one who has germs in the lungs—consumption? Please give some points on this question from one present who is worried about the dread disease."

Answer: "The germs—the tubercle bacilli—you have in your lungs are there for the purpose of splitting up the solid tuberculous matter in order to get rid of it. These germs are never found in the primary stages of the disease. They are not found in 50 percent of the ultimate states of the disease. They are found during the process of splitting up, and they are the best friends you can possibly have. Don't you worry yourself one bit about getting rid of them. It is like people who drink this pasteurized milk which is certified to contain only a limited number of germs—you need not worry, drink your milk cold, and the more germs there are in it the better it will be for you. As to the question of tuberculosis, practically everybody suffers more or less from it at some time in their lives. I have seen the most extreme cases of tuberculosis, where they have vomited quarts of blood, where they have vomited quarts of sputum, and then have got well and had children afterwards. Never give up a case of tuberculosis, and don't worry yourself about germs."

This reply is typically Hadwennian. It would be funny if the subject were not so tragically

serious. It was Goethe who said: "Nothing is more dangerous than active ignorance."—*Journal of the American Medical Association*, April 21, 1923.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

THE last edict from the State Board of Health is to the effect that henceforth physicians will be required to state that specimens sent to the State laboratory for free examination are from patients unable to pay. This is in keeping with a policy that is fair and if followed conscientiously can in no way help to pauperize individuals or contribute to the loss of self-respect.

IT is not too early to remind those who desire to present scientific papers at the next session of the Indiana State Medical Association that the program committee is ready to receive applications. The next session of the Association is to be held in Terre Haute on Wednesday, Thursday and Friday, September 26, 27, and 28. The preliminary program will be presented in the August number of THE JOURNAL.

THIS season of the year does make one desire to go fishing. Spring fever is but a name for the desire to get out and whip the streams and lakes, or tramp the woods—in other words, get away from the humdrum of everyday work and enjoy the invigorating benefits of outdoor recreation when nature is at its best. We hope that all of our medical friends will force themselves to take a vacation, as health and spirits will be improved and more and better professional work will be accomplished after return from an outing.

THE New York State Department of Health is doing a wonderful work in educating the public concerning health problems. It seems to us that not a day passes that we do not get one of their circulars which form a part of the edu-

cational campaign constantly in progress. Some of the health hints are broadcasted from radio stations, but most of the information is sent to newspapers for publication. The articles are timely, written in a terse but instructive way, and are authoritative. It is a pity that every newspaper in the land does not reproduce the articles or something similar, as such action would go a long way toward acquainting the public with the facts that should be known.

WE admit that it is harping on an old subject, but we again wish to emphasize the fact that medical men are not going to maintain the ideals for which they stand unless they all join together in a common cause. The petty differences of opinion, jealousy and indifference to the welfare of each other as individuals prevents the accomplishment of all that could be accomplished for the betterment of medical men economically and professionally. We each and every one of us owe an allegiance to our medical societies, and to the highest and best principles of ethics and morality. For many years we either have been working at cross purposes or we have been apathetic and indifferent to those things which make for a better condition of affairs, and we owe it to ourselves as well as those with whom we come in contact to put forth a more united effort to accomplish results. Therefore, when you are asked to approve and support plans and measures for the good of the profession, give the same your whole-hearted attention. In the next few months you are going to be asked to do many things that you never have been asked to do before.

ONE county medical society in Ohio has struck upon an original plan through which it hopes to stimulate its members' interest in attending meetings. Over in Washington county the officers of the society felt that the time interval between monthly meetings was so great that interest was lost between times, particularly so if a member was obliged to miss a meeting or two.

The "stimulating" plan comprises:

- i. The sending of a report to absentees the day following a meeting in order that they may keep in full touch with activities of their society.
2. The holding of an *ad-interim* meeting each month half-way between regular meetings.

The programs for these meetings consist chiefly of case reports and discussions, coupled with the reading of some article from the medical literature which the appointed member may select. Members are notified of the subject in advance and requested to delve into all the associated literature they may find, so that an intelligent discussion may be had.

This sounds like a practicable idea. Perhaps it could be used in your society.—*Ohio State Medical Journal*.

"ON TO SAN FRANCISCO!" seems to be the popular slogan now among medical men in view of the approaching session of the American Medical Association to be held in San Francisco June 25 and 29. All indications point to a record attendance for a Pacific Coast session. There will be a large representation from the East, as evidenced by the demand for accommodations on several special trains that are starting from New York. The Middle West always does send a splendid delegation to all of the sessions of the American Medical Association and this year will be no exception to the record. The Indiana doctors have an opportunity of going together on a special train known as the "Indiana Special," which will start from Indianapolis, but there will be a Pullman car at Fort Wayne and another at Evansville for the accommodation of doctors in those cities and the immediate vicinity. This Indiana Special will stop at a number of points of interest on the way to San Francisco, and those who join the party will have the option of returning on the Special or coming back independently. Full information concerning the matter may be obtained by writing Dr. Ralph S. Chappel, Terminal Building, Indianapolis, who has the arrangements in charge.

COLLIER's for April 7, 1923, published an article by Samuel Hopkins Adams concerning what science has to say about alcohol, and brushing aside all sentiment in the matter and considering an analysis of facts, the following conclusions are given:

1. The use of alcohol as a beverage except in immoderate quantities does not tend to shorten human life.

2. Lacking sufficient human data, and insofar as biological experiments can determine, the offspring of a strongly alcoholized strain are distinctly and comprehensively superior to the same breed unalcoholized.

3. That alcoholized subjects (chickens) are almost invariably hardier, more resistant to disease than non-alcoholized.

The conclusions are based upon statistics and investigations made by Dr. Raymond Perl, who is one of the leading biological statisticians of the world, and is now connected with the Johns Hopkins School of Hygiene and Public Health. It is stated that Dr. Perl is not concerned with controversy or opinion except as it may affect evidence. He is concerned with ascertainable, demonstrable facts and reckonable probabilities. He is not a propagandist but a scientist, and, as Adam says, Dr. Perl's biological and statistical

findings seem likely to modify radically the prevailing conception of alcohol as a physiological agent.

THE American people are groaning under the effects of increased taxation. The loss of liquor revenue had to be made up by increased taxation, but that wouldn't be so bad if our law makers had the slightest regard for expenditures of the taxpayers' money. The trouble of it is the politicians are the willing tools of uplifters and reformers of every type who offer plausible schemes for the betterment of mankind, always with the final result of adding to the number of bureaus and the number of public employees under fat salaries with the very material necessity for increasing the taxes to meet the graft. Altogether too frequently the people are deluded by the argument that enterprises are to be carried on as a direct result of federal aid, thus giving the impression that local communities are getting something for nothing. In reality, federal aid, no matter whether it is for a million dollar post office in a Southern village of one thousand inhabitants, dredging the river that never can be made navigable, or paying the salaries of a lot of inquisitors who are on the public pay rolls in consequence of the Sheppard-Towner Act, must come as a direct result of taxation of the people. We have to pay for these things, and while every progressive citizen is willing to pay taxes for real tangible benefits, we ought to rebel when it comes to "pork barrel legislation". Indiana should have refused to accept the federal aid offered by the Sheppard-Towner Maternity Act.

Hygeia, the monthly periodical for the laity published by the American Medical Association, made its appearance in April, and if the two numbers already seen are an indication of the standard to be maintained, we predict for the enterprise a great success in giving laymen a better and broader view of health problems. Perhaps the feature that will appeal to lay readers most is the fact that the articles published in *Hygeia* have been prepared by recognized experts in their particular fields, have been censored by a trustworthy editorial committee, and finally sponsored by the great American Medical Association. An attempt will be made to place before lay readers in understandable language a knowledge of health problems from a rational and scientific standpoint, and from time to time there will appear articles dealing with the fads and isms as related to individual and community health, with an exposition of their fallacies. We not only predict a great future for *Hygeia* and believe that its influence will have a far reaching effect in acquainting the public with the value of scientific medicine, but

we believe that it will have another beneficial effect in limiting the sphere of operation of many of the pseudo-medical cults and the sale of various more or less worthless nostrums and appliances as applied to diseases or abnormalities of the human body. The unfortunate part of the whole program is that this new enterprise was not started long ago.

ACCORDING to newspaper report, Henry Ford usually has a cash balance in the banks amounting to over three hundred million dollars. According to his own statement, he never knows within fifteen million dollars as to just how much cash he has on hand. We doctors who know within ten cents how much available cash we have on hand, and worry like the mischief if our bank account is overdrawn \$1.37, are not quite able to understand why one man within a period of thirty years should be able to accumulate a fortune estimated at considerably over a billion dollars, and that ten or fifteen million dollars of that man's wealth can be lost track of entirely. Henry Ford undoubtedly possesses genius, and a keen sense of business management, but we cannot understand why society should permit a man who perfects a "flivver" to become dangerously rich when so many other people who are doing as much or more for mankind are perhaps in dire want. We do not believe that any man should be permitted to own and control for his personal use a fortune of more than ten million dollars at the most, and there is a screw loose in our rules and laws concerning public policy when conditions are such that a man can, at the expense of his fellow-men, accumulate a fortune running into hundreds of millions. Billionaires like John D. Rockefeller and Henry Ford potentially are dangerous to the welfare of human society. The world deserves to profit by all of the ability that they possess, but in return the world does not owe these men a fortune that is beyond all reason.

SINCE the publication of the March number of *THE JOURNAL* we have learned that the commissioner of internal revenue has ruled that traveling expenses of a physician incident to attendance at a meeting of a medical society are not ordinary and necessary expenses incurred in connection with the practice of medicine and that therefore they are not deductible from income tax. To our notion this is a very inconsistent and unreasonable ruling and we hope that the attorneys for the American Medical Association who have been acting in behalf of the medical profession will make an earnest endeavor to have the ruling set aside. As a matter of fact the professional men of every

class are hit harder by income tax than anyone else, for they are taxed upon an earned income whereas the tradesmen, capitalists and men in other lines of business are taxed to a very large extent on unearned increment. A man of leisure who does absolutely nothing except follow his inclinations in sport and pleasure and having a net income of twenty thousand dollars per year may not pay a cent of income tax because his income is derived from non-taxable securities, but the professional man with a net income of twenty thousand dollars which he earns as a direct result of the most exacting physical and mental labor is penalized heavily through the exactions of the income tax. It is radically wrong, and now when we ask that we be permitted to deduct expenses that are necessary for the conduct of our work we are met by refusal on the part of the revenue office. Sometimes we feel that there isn't much incentive for work when the income is derived through such laborious efforts, and then the tax assessor and the federal internal revenue office "sand bags" us for the major portion of it.

FREE MEDICINE.—The Daily Clintonian recently printed a very sensible editorial on the subject of state medicine. The question presented is not one of protecting the physicians from state competition, but of saving the money of the people, who, of course, have to pay for any free service that is rendered. Those who can afford to pay for it ought to be left to do so. "There is," says the Clintonian, "no justification for the state to consider with favor any idea the working out of which would mean that free treatments will be supplied to the individual by either state or national governments. Free groceries and free clothes might as well be put on the program." The exception, of course, is the individual who is too poor to pay, and even in his case there are kindly physicians always ready to help, whether or not there is a fee in sight.

In other words, what is opposed, and what ought to be opposed, is "socialized medicine," or "free state treatment for citizens generally." "It is," says the Clintonian, "bad for the average citizen to seek to get from the public what he ought to pay for himself," since "every young man and young woman ought to be taught to take care of himself or herself."

All this is specially bad at a time when there are so many people who think that everyone ought to be taken care of, and apparently are determined that all shall be. When so much is offered by state and nation to the citizen the temptation is great to accept all that is offered. We are in danger of breeding a race of parasites. People who can afford—even though it be with difficulty—to pay for medical service

and medicines, and even for the advice contemplated by the Sheppard-Towner maternity law, ought to do so, and surely should be unwilling to become charges on the state or their neighbors. Taxes are quite high enough as it is, and also we have traveled too far already on the road that leads to socialism.—*The Indianapolis News*, March 16, 1923.

From far off India, published in the *Kalpadruma*, which states that it is "published on every full moon and new moon days," we clip the following concerning doctors' fees:

"A barrister's fee is traditionally regarded as a tip or honorarium. As he cannot sue for it in the courts, no judge is called upon to say what fee is reasonable. With medical men it is otherwise. There has lately been a judicial pronouncement on doctors' charges in a case where as often happens—the doctor was called in and no arrangement was made as to fees. There were 52 visits as well as attendance at two consultations and at an operation for appendicitis. The doctor sent in a bill for £ 75. The client, a rich man, thought this rather steep and asked for details. Thereupon the doctor in a huff sent in a detailed bill for £ 131.5 and when it was objected to brought an action. In eventually awarding £ 97.13 the judge elaborately analyzed the medical fee system. Fees, he said, depended on locality, on the social status and popularity of the doctor. It seemed usual to measure a patient's obligations not so much by his actual monetary resources as by his social position. His house rent can be estimated if his bank book cannot be seen. This method is "perhaps not on the whole an unjust one." "He who employs the apparatus of wealth may be fixed with the presumption of wealth." Doctors, added the judge, have a long and expensive education; their costs of living are high in fashionable neighborhoods; their profession is generous in treating, for small fees or no fees at all, poor patients who cannot afford to pay. Thus judicial confirmation is given to the view that rich patients can be made to pay higher than normal fees because poorer folk pay little or nothing."

After hearing the law courts decide on the fees of the medical profession it would be amusing to let the British Medical Association have its say as to the fees exacted at the bar.

LAST month we called attention to the growing menace of bureaucracy in this country, and the extensive parts so unhappily played by the medical politicians in its insidious spread. Since we penned that editorial, a flagrant instance has come to our notice. The Illinois State Board of Health has promulgated a set of rules and regulations, avowedly intended to restrict the dis-

semination of venereal diseases, embodying the most arbitrary and despotic inference with individual liberty of conduct which we have yet seen attempted by bureaucratic ukase—and that is saying a good deal. Time and space will not permit a detailed analysis and criticism of this interesting piece of sovietism in a supposedly democratic country; nor is it necessary to our purpose. As an example of its general character we may cite its requirements that the druggist shall report to the State Board every sale of a drug ordinarily employed for the treatment of a venereal disease, unless upon a physician's prescription. Other clauses in the edict are of a similarly meddlesome nature. It is to be understood that, in virtue of their promulgation by the State Board of Health, these regulations have all the force and effect of law, and are subject to criminal penalties.

Now, syphilis and gonorrhea and other venereal diseases are very serious affairs. No one, least of all a representative of medical science and practice, has the least desire of disputing that. And every right-thinking citizen is heartily in favor of all reasonable public measures for limiting their ravages and preventing their spread, even to the extent of imposing a certain degree of inconvenience and sacrifice upon individual citizens who are unfortunate enough to suffer from such diseases, or to be concerned in their consequences. So are many other social conditions that we can think of serious evils. But that venereal diseases, or any of those other evils, constitute such an emergency as to call for a practical suspension of the bill of rights is a proposition to which only the most fanatical reformer, blind to everything except his own fatuous obsession, will subscribe. The remedy is worse than the disease.

There, in fact, lies the root of the mischief in all this paternalistic, bureaucratic legislation and regulation. Certain evils bulk large in the vision and thought of a certain class of self-constituted reformers. They are ready to trample under foot all legal safeguards and individual rights which democracy has bought at the cost of blood and struggle through years of evolution and revolution, to bring about the correction of these incidental evils. At the time, the evils that they are attacking bulk larger in the public mind—because they are more obvious—than the abuses which are invoked to correct them. And thus these abuses are allowed to insinuate themselves into the State, and to grow to proportions which at last subvert the whole foundation of democratic government.

Thus, in this particular instance, we are confronted with the horror and danger of venereal disease. So overwhelmingly do they obsess the profession and the public at the present moment that in writing as we do we actually risk the

accusation from those obsessed of being in favor of syphilis and gonorrhea. There is a loud demand for their suppression and abolishment. The public endorses the demand, and a commission, with State authority, but without any direct legislative authorization, decrees that every man and woman who refuses examination shall be quarantined and his or her house placarded, that any person who has been exposed to venereal disease may be held for thirty days, and so on. Thus there is vested in the health board the power to wreck domestic happiness, social standing or business position, without any normal process of law—to set aside, in fact, as we have said, the bill of rights, under the protest that it is to correct one evil in the social system.

It is a most dangerous tendency of our present-day life, this tendency to resort to bureaucratic rule, or even to legislation, for the cure of every ill; and, we are bound to repeat, the medical profession is particularly prone to it. As an example of the lengths to which it is carried, we have this very day run across an article in a current medical journal by a physician whose pet obsession is that everybody ought to adopt a certain posture when they evacuate their bowels, and in the course of his paper this man seriously proposes that "There should be a law on the statute books of the government requiring and enforcing the installation of toilets that are low enough and of a design to permit the natural or primitive posture at stool." He really believes it, too—and will get it enacted into law if he can. It would be laughable if it were not so serious.

The time is coming, of course, when there will be a popular revulsion against all this paternalism and bureaucracy. When that time arrives, the medical profession, which, through its politicians, has been loading the public with these irksome burdens, will be held in execration, unless it first breaks its own bands asunder, and frees itself from the machinations of its political betrayers.—*Medical Brief*, January, 1923.

DEATHS

R. S. BYERS, M. D., of Trafalgar, Indiana, died April 6. Dr. Byers was seventy-one years of age. He graduated from the Medical College of Indiana, Indianapolis, in 1880.

JOHN N. BAUGHMAN, M. D., of Evansville, died April 15, at the age of seventy years. Dr. Baughman graduated from the University of Louisville, Medical Department, in 1875.

CHARLES A. HUNTER, M. D., of Reddington, died March 30. Dr. Hunter graduated from the

Physio-Medical College of Indiana, Indianapolis, in 1886. He was a member of the Jackson County Medical Society, the Indiana State Medical Association and the American Medical Association.

CHARLES CHITTICK, M. D., aged seventy-four years, died at his home in Frankfort, April 7. Dr. Chittick was a member of the Clinton County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Ohio, Cincinnati, in 1876.

HARRY G. FLEMING, M. D., of Anderson, was killed in an automobile accident near Indianapolis, April 6. Dr. Fleming was forty-five years of age. He graduated from the Medical College of Indiana, Indianapolis, in 1905. He was a member of the Madison County Medical Society, the Indiana State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE Elkhart County Medical Society held its annual meeting April 5 in Elkhart.

THE Eleventh Councilor District Medical Society held a meeting at Kokomo, May 17.

DR. H. R. ALLEN, of Indianapolis, has returned from a six months' trip around South America.

DR. and MRS. W. C. FARNUM, of South Bend, will sail May 29th from New York for a six months' tour of Europe.

DR. KENNETH L. CRAFT has announced the removal of his office from suite 611 to suite 711, Hume-Mansur Building, Indianapolis.

DR. GEORGE B. SHATTUCK, for many years editor of the *Boston Medical and Surgical Journal*, died on March 13, at his home in Boston.

THE LaPorte County Medical Society held its regular monthly meeting at LaPorte, April 13. Dr. A. M. Sullivan, of South Bend, presented a paper.

THE Adams and Wells County Medical Societies held a meeting at Decatur, April 6. Dr. Miles Porter, Jr., of Fort Wayne, presented a paper on "Goitre".

A CITATION for the award of a Distinguished Service Medal to Dr. Harvey Cushing, of Boston, has been approved by Secretary of War Weeks.

DR. E. M. VAN BUSKIRK has announced the removal of his office to The Fort Wayne Medical Laboratory Building, 327 West Berry St., Fort Wayne.

DR. F. G. BANTING, Canadian physician and discoverer of insulin, presented a lecture before the Indianapolis Medical Society at the Hotel Lincoln, April 10.

COMMENCEMENT exercises for the 1923 class of the St. Joseph's Hospital School for Nurses were held on Tuesday evening, May 15th, in St. Paul's Auditorium, Fort Wayne.

THE 1923 class of the Lutheran Hospital Training School for Nurses held its commencement exercises Wednesday evening, May 16, in the St. Paul Auditorium, Fort Wayne.

DR. GEORGE E. MILLS has been appointed resident physician of the Irene Byron Tuberculosis Sanitarium near Fort Wayne. Dr. Mills began his duties as physician of the institution on May 1.

THE Boone County Medical Society held its April meeting at Lebanon, April 4. Dr. Arthur M. Mendenhall, of Indianapolis, presented a paper on "Irving W. Potter and Internal Podalic Version".

THE LaPorte County Medical Society held a meeting at Michigan City, May 10. A paper was presented by Dr. W. Louis Hartman, of Detroit, the subject being "The Effects of Syphilis on Industrials".

THE Tri-County Medical Society, consisting of Jackson, Jennings, and Bartholomew counties, held a meeting in Seymour, April 4. Dr. Louis Segar, of Indianapolis, presented a paper on "The Diseases of the New-born".

DR. ROBERT A. LAMBERT has severed his connection as assistant professor of pathology and bacteriology in the Yale University School of Medicine to assume the professorship in the department of pathology at Sao Paulo, Brazil.

THE Muncie Academy of Medicine held its weekly meeting at the Hotel Roberts, April 27. Dr. Joseph L. Miller, of Chicago, presented a paper on "Protein Sensitization". The paper was discussed by Dr. James Wynn, of Indianapolis.

THE Indianapolis Medical Society at its regular meeting, May 1, gave a reception for Dr. George F. Edenharter, of Indianapolis, in honor of the completion of his thirtieth year as superintendent of the Central Indiana Hospital for the Insane.

THE annual state banquet of Nu Sigma Nu fraternity was held April 28th, in the Athenaeum, at Indianapolis. Dr. McClure, of the Ford Hospital staff, of Detroit, Michigan, gave a lecture with motion pictures of some of the things that that hospital is doing.

THE Rockefeller Foundation has elected to its board of trustees Dr. Ray Lyman Wilbur, president of Stanford University, and William Allen White, editor, Emporia, Kansas, and to membership on the International Health Board, Dr. David L. Edsall, dean of the Harvard Medical College.

HONOR has been paid to the late Dr. Frank B. Wynn in giving his name to a peak in Glacier National Park, the Interior Department has announced. Wynn Mountain stands at the mouth of Canyon Creek. Dr. Wynn, who lost his life in an accident while climbing Mt. Siyeh in 1922, was a physician of Indianapolis, Ind.

At the weekly meeting of the Muncie Academy of Medicine, held at the Hotel Roberts, April 20, Dr. R. A. Kinsella, of Washington University, St. Louis, Mo., presented a paper on "General Discussion of Endocarditis with Particular Reference to the Recent Reported Treatment of Bacterial Types with Sodium Cacodylate."

SUMMER courses will be offered in Indiana University by the departments of Pathology, Pharmacology, Medicine, Surgery, Gynecology, Genito-Urinary Diseases; Rhinology, Otolaryngology, and Ophthalmology, and Dermatology and Syphilology. The courses will be offered during the six weeks' period, June 7 to July 19, 1923.

THE American Pharmaceutical Association has a fund of \$400 which will be expended after October 1, 1923, for the encouragement of research. Investigators desiring financial aid in their work should communicate before June 1 with H. V. Arny, chairman of the research committee, 115 West Sixty-eighth Street, New York, giving their record and the particular line of work for which the grant is desired.

THE new building of the American Hospital of Paris, now being erected at Neuilly, is to be known as "The American Memorial Hospital, 1914-1918," and will be dedicated to the memory of the American dead in the World

War. The building has been donated by Mrs. Robert Bacon as a memorial to her husband, the late ambassador to France.

THE American and Canadian Section of the International Association of Medical Museums held its sixteenth annual meeting in Boston, March 29. The following officers were elected: President, Dr. Frank B. Mallory, Boston; vice-president, Dr. Howard T. Karsner, Cleveland; secretary-treasurer, Dr. Maude E. S. Abbott, McGill University, Montreal, Canada.

At the annual meeting of the American Association of Pathologists and Bacteriologists in Boston, March 30, the following officers were elected for the ensuing year: President, Dr. Theobald Smith, Princeton, N. J.; vice-president, Dr. James Ewing, New York; treasurer, Dr. Frank B. Mallory, Boston, and secretary, Dr. Howard T. Karsner, Cleveland.

DR. H. F. MITCHELL, of South Bend, was elected president of the Northern Tri-State Medical Association at a recent meeting of the organization in Cleveland, Ohio. Dr. A. J. Weitz, of Montpelier, Ohio, was elected treasurer and Dr. C. W. Haywood, of Elkhart, Indiana, secretary. It was indicated that an Indiana city would be chosen for next year's convention.

THE twelfth annual meeting of the American Drug Manufacturers' Association was held in New York City, April 16-19. Matters pertaining to narcotic regulations, legislation, pharmaceutical progress, scientific research, medicinal chemicals and other subjects were discussed. A. S. Burdick, of the Abbott Laboratories, Chicago, was elected president of the Association for the ensuing year.

A SCIENTIFIC scholarship to be known as the "Joseph R. Eastman Scientific Scholarship" for the purpose of sending one Wabash student each summer to the summer session of the Woods Hole Marine Biological Laboratory, at Woods Hole, Mass., has been given by Dr. Eastman and will be maintained by him as long as it gives satisfactory results. The scholarship amounts to seventy-five dollars.

At the thirty-third annual meeting of the Association of American Medical Colleges, at Ann Arbor, Michigan, the following officers were elected: President, Dr. Irving S. Cutter, Omaha; vice-president, Dr. Ray Lyman Wilbur, San Francisco; secretary, Dr. Frederick C. Zapffe, Chicago; executive council, Dr. Nathaniel C. Allison, St. Louis, and Dr. Walter L. Niles, New York. The next annual meeting will be held at Omaha.

RECENTLY amendments were passed to the Quebec Medical Act. The bill holds that anyone who assumes the title of doctor without qualifications, whether in newspaper advertising or by other means, is liable to fines ranging from \$50 to \$200. There is also a prison sentence of three months for improper advertising of this character as well as a \$200 fine for any offense subsequent to the second.

As the result of representations made by the Tippecanoe County Medical Society, the Fraternal Order of Eagles, on January 1, 1924, will dispense with the services of a fraternal physician and will discontinue contract practice for the members of the order. The Society will recommend to the hospitals of the community that, pending the discontinuance of such services and of contract practice, the present fraternal physician be allowed such hospital privileges as are extended to members of the Society.

THE St. Louis Medical Society has opened the second campaign to give aid to the crippled children of the state and its surrounding territory. Last year this campaign was most successful and children were benefitted, not only from St. Louis and the state, but from seven other states as well. It was not possible to reach all in that one campaign and it is the purpose of the second campaign to re-check and treat those who were not benefitted last year. The parents or friends of the unfortunate children may send in the names.

DURING April the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies:

Abbott Laboratories:

Neutral Acriflavine-Abbott.

Tablets Neutral Acriflavine-Abbott, 0.03 Gm. ($\frac{1}{2}$ Gr.).

Enteric Coated Tablets Neutral Acriflavine-Abbott, 0.03 Gm. ($\frac{1}{2}$ Gr.).

Hynson, Wescott & Dunning:

Phenoltetrachlorphthalein-H. W. & D.

Ampules Phenoltetrachlorphthalein-H. W. & D.

Mallinckrodt Chemical Works:

Carbon Tetrachloride Medicinal-M.C.W.

Merck & Co.:

Skiabaryt (for Rectal Use)-Merck.

Skiabaryt (for Oral Use)-Merck.

Powers-Weightman-Rosengarten Co.:

Carbon Tetrachlorid C.P.-P.W.R.

Nonproprietary Articles:

Neutral Acriflavine.

Carbon Tetrachloride Medicinal.

AFTER an interval of exactly twenty years, the class of 1903 of the Medical College of Indiana reconvened in Room 1 of the old College building. Forty-two of the seventy-eight graduates were present, and letters were read from a number of the members who have located in distant parts of the country. Eleven members of the class have died. There was more than sixty percent of the surviving members present. The class challenges any other class to make a better showing than this. Most of the faculty that instructed the Class of 1903 as students have passed away, but of the survivors, Drs. Oliver and Schaefer appeared and welcomed the class back to Indianapolis. During the afternoon, Mr. Neff conducted the class through the Long Hospital and the new college building to demonstrate the advances that have been made in medical education since 1903.

The class dinner was held at the Athenaeum Club and each one responded with a talk covering the following points: "How I happened to choose medicine as my profession." "Would I do it again if I had another chance." "My greatest bonehead mistake in diagnosis." "My first drug prescribed in practice."

The three bachelors as well as the three grandfathers of the class were toasted. A vote was taken as to which member had changed the most and which one had changed the least during the twenty years, and other stunts which delayed adjournment until a late hour were enjoyed.

Dr. F. S. (Davy) Crockett was elected permanent secretary with instructions to correspond with the members and call another reunion at a future date.

SOCIETY PROCEEDINGS

"LET'S GO—3000 MEMBERS FOR 1923"

To realize this, our President's slogan for this year, it will be necessary for every county society to increase its membership over that of 1922.

The following list comprises the counties who have already done this, and it is hoped that in the succeeding numbers of THE JOURNAL, this list will grow until it includes every county society. If the secretary of any of the smaller county societies will demonstrate to Dr. Combs that his county society cannot show further accessions because of the fact that every eligible doctor is already a member, the name of this secretary will be placed at the head of the list.

County	Secretary
1. Adams.....	B. F. Beavers
2. Dubois.....	W. D. Bretz
3. Elkhart.....	S. T. Miller
4. Knox.....	C. E. Stone
5. Noble.....	S. E. Munk
6. Whitley.....	F. G. Griser
7. Allen.....	D. D. Johnston
8. Boone.....	W. H. Spieth
9. Daviess-Martin.....	H. C. Wadsworth
10. Gibson.....	A. H. Rhodes
11. Rush.....	J. M. Lee
12. Shelby.....	F. E. Bass
13. Warrick.....	W. P. Ford
14. Floyd.....	P. H. Schoen
15. Fulton.....	A. E. Stinson
16. Huntington.....	M. G. Erehart
17. Monroe.....	F. H. Austin

18. Forter.....	C. H. DeWitt
19. Clinton.....	L. L. Harding
20. Howard.....	Florence Olmsted
21. Kosciusko.....	O. H. Richer

INDIANA HOSPITAL ASSOCIATION

The Indiana Hospital Association held its third annual meeting at the Hotel Lincoln in Indianapolis on Wednesday, April 18th. The convention was in session throughout the day, the morning being given over chiefly to the business matters pertaining to the organization, to President C. S. Woods' address and a discussion on "The Relation of the Physician to the Hospital", which was led by Dr. M. T. MacEachern, president-elect of the American Hospital Association. Dr. Woods in his address exhorted hospitals in Indiana to come to a proper realization of the value of the Indiana Association in the hospital field both in the state and nation, emphasizing the fact that a well-organized and conducted hospital association could be a most important factor in promoting an inspirational and animated program of hospital betterment in the individual hospital. He urged the entire personnel of the hospital organizations throughout the state to lend their support to the Association program.

The Association was very much gratified at the good fortune in having Dr. MacEachern present. His discussion on "The Relation of the Physician to the Hospital" brought forth some very vital and interesting facts on the subject. Dr. MacEachern urged the hospitals to encourage the appointment of physicians on various committees in the hospital organization who would bear important responsibilities in the administrative activities in the hospital as the x-ray department, operating room technique, laboratory conduct and other important activities.

A paper by Mrs. Mary J. Davis, dietitian of the Indianapolis City Hospital, on "The Place of the Dietitian in the Hospital" was well received and stressed the importance of the dietitian in a hospital organization, emphasizing the fact that the dietitian was occupying a most strategic position in the hospital organization in view of the fact that modern medicine was making scientific dietary demands upon the hospital. "The Buying, Preparation and Use of Foods" by Mrs. Margaret Marlow, dietitian at the Indianapolis Methodist Hospital, and "The Responsibilities of the Hospital for the Adequate Care of the Patient" by Miss Josephine Mulville, superintendent of nurses at the Indianapolis City Hospital, brought forth many interesting and helpful comments on the subjects. During the afternoon session a program of varied subjects of interest to practically all persons of the hospital organization was rendered. Mr. Fred D. Rose, a trustee of the Home Hospital, Muncie, gave a very interesting account of the relation of the Board of Trustees in his particular hospital, indicating some rather unusually helpful and co-operative activities on the part of trustees in hospital administrative matters. A paper on "Hospital Per Diem Cost" was presented by Robert E. Neff, administrator of the Robert W. Long Hospital, Indianapolis. Mr. Neff declared the importance of a proper and adequate cost-finding system in all hospitals regardless of size, urging that accurate cost figures should be kept not only for comparative usage with certain accepted standards but for the reason that such figures would enable the busy hospital executive to have facts and figures in such form and clarity as to make it possible for him to visualize conditions readily in the various departments of the hospital. Hospital standardization with illustrations by lantern slides was presented by Dr. MacEachern. His talk was most inspiring and enlightening and was most enthusiastically received. Dr. MacEachern explained fully

the standardization program as presented by the American College of Surgeons in its various endeavors at hospital betterment. Certain fundamentals in the standardization program were explained in splendid detail, with the result that the program was doubtlessly popularized in the minds of all present. Dr. MacEachern's presentation was a delight to all and it was generally agreed that his part in the program was one worthy of the highest commendation. "Pancreatic Extracts in Diabetes" by Dr. A. L. Walters of the scientific department of the Eli Lilly Company was quite absorbing in its interest. The rapidly increasing use of Iletin, which has been recently accepted by modern medicine, was discussed in its many phases. The program closed with the report on a survey of laboratory work of hospitals in Indiana by Dr. W. H. Shimer, director of the laboratory, St. Vincent's Hospital, Indianapolis. The survey which had been conducted by Dr. Shimer showed that a good percentage of hospitals in Indiana had come to a realization of the importance of properly equipped and adequate laboratory facilities and were offering laboratory services of very high character.

Officers for the ensuing year were elected as follows:

President—Robert E. Neff, Administrator of Robert W. Long Hospital, Indianapolis

First Vice-President—Sister Rose, St. Vincent's Hospital, Indianapolis.

Second Vice-President—Miss Lillian E. Barlow, Superintendent Witham Memorial Hospital, Lebanon.

Secretary—Miss Harriett Jones, Superintendent Bloomington Hospital.

Treasurer—Mrs. Ethel P. Clark, Director of Training School for Nurses, of Indiana University, Indianapolis.

CORRESPONDENCE

POLICY OF THE STATE BOARD OF HEALTH EDITOR THE JOURNAL:

You will recall some correspondence recently in reference to a protest from a number of private laboratory physicians of the state against certain phases of the work of the State Board of Health Laboratory. The Board has had this matter under consideration for some time and has investigated every phase of the situation with the view to determining just what the policy of the State Laboratory should be in justice to the work of the Board on the one hand and in justice to laboratory physicians on the other.

At the regular meeting of the Board April 4, an announcement concerning the policy of the Laboratory was adopted by the Board. A copy of this announcement and statement of policy I am enclosing with this letter. At the same time I am sending copies of this announcement to each of the Laboratory physicians of the state who joined in the protest, and will send a copy to the secretary of each county medical society. I believe this matter is of sufficient importance to be given publicity to the doctors through the columns of THE JOURNAL.

Very truly yours,

WM. F. KING,

State Health Commissioner.

AN ANNOUNCEMENT CONCERNING THE POLICY AND ACTIVITIES OF THE LABORATORY OF HYGIENE OF THE INDIANA STATE BOARD OF HEALTH

The Laboratory of Hygiene, with its subdivision, the Division of Bacteriology and Pathology, was created by the legislature, Acts 1905, Chapter 38, for the purpose of "making pathological examinations and studies in hygiene and preventive medicine to aid in the enforcement of the health laws, and for no other purpose". The State Board of Health has always interpreted this act in a broad sense, believing that it was the intent of the legislature not to limit

the Laboratory to studies in connection with epidemics or confine the activities of the Laboratory to communicable diseases only. On the contrary, the Board has felt that the Laboratory should contribute in every reasonable way, not only to the prevention and control of communicable diseases, but to the protection and preservation of public health, and the prevention of unnecessary illness of any kind. It has not been the purpose of the Laboratory at any time to enter into competition with practicing physicians in diagnosis or treatment, but it is the fixed policy to accept specimens for Laboratory analysis or examination only as such specimens are sent to the Laboratory by physicians. The single exception to this policy is in the case of state institutions and of clinics which are under the supervision of the State Board of Health.

That the Laboratory has come to occupy a place in medical practice in the State of Indiana, and is rendering a distinct service to the physicians of the state, is shown by the fact that the number of specimens sent to the Laboratory for examination has increased each year far beyond the normal increase in population. It is not necessary to go into detail in this matter, because the work of the Laboratory and the service it renders are familiar to practically every physician in Indiana. From time to time the number of diseases classed as communicable and, therefore, dangerous to public health, has been added to by rules and regulations of the State Board of Health until at the present time the Laboratory is required to make examinations as follows:

1. Sputum and various discharges for tuberculosis.
2. Throat cultures for diphtheria.
3. Blood for Widal's reaction, malaria, and various blood diseases.
4. Feces for parasites and typhoid bacilli.
5. Urethral and vaginal pus smears for gonococci.
6. Heads of dogs and other animals for rabies.
7. Blood for Wassermann test.
8. Pathological tissues for diagnosis in cases where the patient is unable to pay a private laboratory for such examination.

A study of the above list will disclose that, with the possible exception of Number 8 (tissue diagnosis), all such examinations have a public health bearing and have to do with intelligent enforcement of health laws.

For some time past there have been expressions of dissatisfaction from various private and hospital laboratories in the state because of a feeling that the Laboratory of the State Board of Health has been, and is, encroaching upon this private field. More recently this feeling has taken the form of a petition and brief, submitted to the State Board of Health by private laboratory physicians and others, setting forth their views in reference to the work of the State Laboratory, with the recommendation and request that the State Laboratory confine its services strictly to public health examinations and to patients who are indigent, and who are, therefore, proper beneficiaries of free public medical services. Attention is called in the brief to the fact that physicians send specimens from patients who can, and who do, pay physicians for the service which the State Laboratory renders free and at the expense of the general taxpayer. It is pointed out to be the duty of the Laboratory to adopt such policy, or to enforce such restrictions as will prevent this abuse, and it is recommended that this be done by requiring physicians to sign a statement on a blank form to accompany the specimen, certifying that the patient from whom the specimen was taken is indigent and unable to pay for medical attention, and to further certify that the physician sending in the specimen is making no charge for his services in the case.

Both the State Board of Health and the Superintendent of the Laboratory of Hygiene are anxious to co-operate with the physicians of Indiana to the fullest possible extent, because only by intelligent co-operation between the medical profession and health departments can the greatest good be accomplished in public health endeavor. There are two basic errors, however, in the suggestion and recommendation above referred to: First, that the work of the State Laboratory either by any reasonable interpretation of the law creating the Laboratory, or by any proper consideration of public welfare, can be restricted to indigents in the commonly accepted meaning of the term, or to those who are financially unable to pay the usual charge for private laboratory service. Second, that the State Board of Health through its Laboratory of Hygiene or otherwise has either a legal or moral right to inquire whether physicians are being paid for professional services. It may be reasonable to require persons desiring an examination for tuberculosis and who are able to pay a private laboratory fee to obtain this service from private laboratories rather than from the State Laboratory. This rule also may apply to examination of feces for parasites, to urinalysis, and to examination of pathological tissue for diagnosis, but no such requirement can be made in the case of throat cultures

for diphtheria, examinations for typhoid bacilli, bloods for Wassermann test, pus smears for gonococci, or examinations for rabies, because all of these have a distinct public health bearing and certainly have to do with the enforcement of health laws regardless of whether persons are indigent or whether physicians are being paid for their services.

The policy of the State Board of Health in reference to the work of the State Laboratory of Hygiene can be stated as follows:

First, that all specimens having to do with tuberculosis for diagnosis, diphtheria, malaria, typhoid, Wassermann for diagnosis, gonorrhea for diagnosis, rabies, and any other communicable disease listed in the rules of the State Board of Health, will be accepted by the Laboratory for examination without question when submitted to the Laboratory by physicians of the State of Indiana.

Second, that the Laboratory will require a statement from physicians submitting specimens for feces for parasites and pathological tissues for diagnosis, that the person for whose benefit the service is requested is financially unable to pay a reasonable fee for such laboratory service.

Third, that all specimens of whatever kind submitted from state institutions or from clinics maintained under the supervision of the State Board of Health will be examined without question.

The State Board of Health not only deprecates but condemns the use of the State Laboratory for personal gain or professional compensation by anyone. It is the desire of the Board to extend fraternal co-operation to all citizens, whether lay or professional, and to offer this co-operation with but one consideration in mind, that of public welfare. The State Board of Health has confidence in the altruism and integrity of the medical profession of Indiana, and believes that the profession will not wittingly abuse or betray that confidence. The State Board of Health has faith in the citizenship of Indiana and believes that the support and co-operation of that citizenship will not be withheld from any cause that makes for public good. The State Board of Health has a solemn appreciation of its duties and responsibilities to the whole public as expressed in the statutes of the state and is pledged to the discharge of these duties and responsibilities in the fullest possible measure.

The State Board of Health submits this declaration of policy, with special reference to the Laboratory of Hygiene in the belief that a clear-cut understanding as to the use and abuse of the service afforded by the Laboratory will not only go far in removing any basis for just criticism, but will strengthen both medicine and hygiene in the esteem and confidence of the public.

CONCERNING BLURRED ILLUSTRATION, DR. McCASKEY'S ARTICLE, APRIL JOURNAL

Fort Wayne, Indiana, May 1, 1923.

To the Editor:

I am asking you to reproduce the following out of the electrocardiogram published in connection with my article on Heart Disease in the April issue of THE JOURNAL because a considerable part of this cut was entirely unreadable. This was undoubtedly due to a fault in your printing office, as the proofs of the cut were quite clear and satisfactory.

Hoping that the printed cut will show equally well or better than the proof, as it should, I am,

Very sincerely yours,

G. W. McCaskey.

[Editor's Note:—While we believe that the blurring of one of the illustrations connected with Dr. McCaskey's article, published in the April number of THE JOURNAL, occurred as a result of faulty press work and probably in a few copies of THE JOURNAL only, yet in response to the request of Dr. McCaskey we are pleased to reproduce the illustration herewith.]

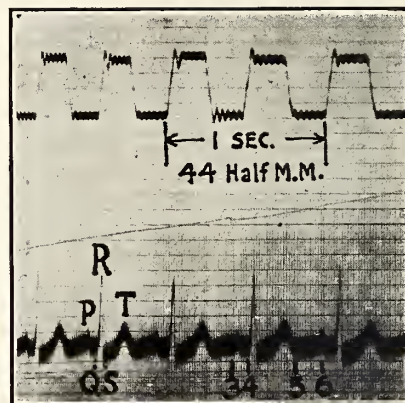


FIGURE 2—Electrocardiogram: LEAD 1
D Case, 4th Series No.

P, auricular wave. Q, inconstant wave, beginning of ventricular complex. R, main ventricular wave. S, inconstant wave. T, wave, close of ventricular complex. 1, time marker. 2, electrocardiogram. 3, beginning of P wave. 4, beginning of R wave. 5, end of T wave and of ventricular complex. 6, beginning of next P wave. (3 to 4), P-R interval—1-7th second. 5 is end of ventricular systole and also end of cardiac cycle. 3-5 indicates complete cardiac cycle. 4-5, complete ventricular complex. 6, beginning of next P wave. 5 to 6 rest period of the heart. The character of the different waves is about average normal in this tracing.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

TINCTURE No. 111 DIGITALIS-P. D. & Co.—A fat-free tincture of digitalis which, standardized by the minimum lethal dose frog heart method of Houghton, is 50 percent stronger than tincture of digitalis-U. S. P. The actions and uses of tincture No. 111 digitalis-P. D. & Co. are the same as those of tincture of digitalis. It was introduced at a time when the "fat" of digitalis was believed to cause gastric disturbances. This claim of superiority is not tenable and the preparation is sold simply as a standardized tincture of digitalis. To minimize deterioration through light and air, the preparation is marketed in one ounce amber vials and saturated with carbon dioxide. Parke, Davis & Co., Detroit, Michigan.—(*Jour. A. M. A.*, April 7, 1923, p. 1003).

BORCHERDT'S MALT, COD LIVER OIL AND IRON IODIDE.—Each 100 Cc. contains ferrous iodide 0.88 Gm. (4 grains per fluidounce), cod liver oil 25 Cc. and Borchardt's malt extract (plain) 75 Cc. Borchardt's Malt Extract Co., Chicago.—(*Jour. A. M. A.*, April 21, 1923, p. 1143).

CARBON TETRACHLORIDE MEDICINAL—Carbon tetrachloride has narcotic and anesthetic properties somewhat similar to those of chloroform. It has recently come into use as a vermifuge in the treatment of hookworm disease. It also removes some intestinal parasites other than the hookworm. It is reported that usually about 95 percent of the hookworms are removed by the first dose. Its use appears to be relatively safe, but serious symptoms and even death have been reported. It is administered in water, milk or gelatin capsules on an empty stomach, followed by a purgative dose of magnesium sulphate.

The dose is from 2 Cc. to 3 Cc. (30 to 45 minims) for adults. Carbon tetrachloride is a heavy liquid, having an odor somewhat like that of chloroform. It is almost tasteless and almost insoluble in water.

PHENOLTETRACHLOROPHTHALEIN-H. W. & D.—A dibasic dye formed by the condensation of phenol and

(Continued on Adv. Page xx)



Catgut Ligatures

Of great strength and absolute sterility. Boilable, Non-boilable, plain and chromic, also Iodized, 60-inch lengths.

Pituitary Liquid

Surgical 1 c.c. ampoules; Obstetrical ½ c.c. ampoules, six in a box. Free from preservatives, physiologically standardized.

Relief for Hay Fever Victims

May be had by using Suprarenalin Solution or Ointment. Apply to nose, eyes and throat.

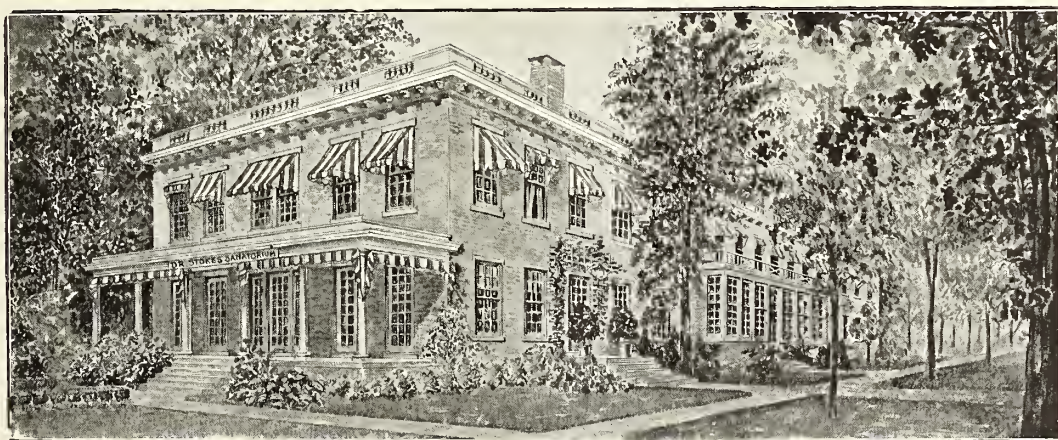
Suprarenalin Solution 1:1000 is stable, uniform and non-irritating.

Literature for Physicians

ARMOUR AND COMPANY

CHICAGO

DR. STOKES SANATORIUM



HOME FOR THE INCURABLE INSANE, AGED AND INFIRM

A strictly modern sanatorium, fully equipped for the scientific treatment of all nervous and mental affections. Situation retired and accessible.

Alcoholic and Drug Habit Treated by the Gradual Reduction Method Only

An addition of thirty rooms has lately been added to our already large sanatorium. This makes it possible for us to separate all male and female mental patients. For details write

DR. STOKES SANATORIUM

923 Cherokee Road

EDGAR W. STOKES, M.D., Supt.

Louisville, Kentucky

TRUTH ABOUT MEDICINES

(Continued from Page 188)

tetrachlorophthalic acid or its anhydride. Phenoltetrachlorophthalein has been used for the determination of the functional output of the liver. It can be used in the form of the sodium salt, intravenously, but cannot be given subcutaneously or intramuscularly. The substance may also be obtained in the form of Ampules Phenoltetrachlorophthalein containing a solution of disodium phenoltetrachlorophthalein. Hynson, Wescott & Dunning, Baltimore, Maryland.—(*Jour. A. M. A.*, April 28, 1923, p. 1218).

PROPAGANDA FOR REFORM

ETHYLENE AS AN ANESTHETIC.—The Council on Pharmacy and Chemistry has published a preliminary report on the experimental status of ethylene as an anesthetic. A. B. Luckhardt and J. B. Carter report that animal experiments with ethylene indicate that ethylene has a direct action on the nervous system when a concentration of 90 percent is used; that the motor reflexes are abolished at this concentration, and that the phenomena produced by the undiluted gas are partly asphyxia, which factor can be removed by the addition of oxygen, when it is seen that narcosis results from the ethylene itself. Trials carried out on human subjects appear to confirm the anesthetic value of ethylene. The investigators believe that ethylene will be found more desirable than nitrous oxid, but the experiments reported have been carried out on persons in normal health only. The Council reports that confirmation of the work is necessary before ethylene can be admitted to New and Nonofficial Remedies but that further research with the gas is warranted. As a preliminary to such research, the Council cautions that the quality of the product must be determined.—(*Jour. A. M. A.*, April 7, 1923, p. 1003).

ZONITE.—Zonite is advertised as a new and wonderful discovery based on the "Carrel-Dakin" solution. The propaganda is, in effect, a capitalization of the work of Carrel-Dakin and others. Chemically Zonite, after dilution with an equal quantity of water, is claimed to be essentially the same as Surgical Solution of Chlorinated Soda (Carrel-Dakin) of New and Nonofficial Remedies.

Zonite has been exploited to both physicians and the public.—(*Jour. A. M. A.*, April 7, 1923, p. 1024).

OWL ENAMEL TOILET CREAM.—This preparation, manufactured by the Owl Drug Co. (Kansas City, Mo.), is sold for the alleged purpose of "Beautifying the Complexion and Rendering the Skin Soft and Velvety". Dr. Henry W. Woltman of Rochester, Minnesota, has reported a case of lead poisoning in a woman who had been using Owl Enamel Cream. The A. M. A. Chemical Laboratory analyzed the product and found it to be composed essentially of lead carbonate, calcium carbonate and glycerin. The indiscriminate sale of a preparation of this sort is not merely a menace to the public health but a commentary on the laxity of our laws. It is notorious that certain salts of lead have for years been responsible for cases of chronic lead poisoning, due to their employment in cosmetics. In spite of this any concern, responsible or irresponsible, can sell for indiscriminate use a cosmetic loaded down with poisonous ingredients.—(*Jour. A. M. A.*, April 7, 1923, p. 1022).

ALCOHOL AND DISEASE.—Recently a statistical report regarding the possible influence of alcohol on the prognosis of pneumonia in a large municipal hospital has been published. The data for nearly 3,500 cases of lobar pneumonia showed that, with reference to the patient's habits of indulgence in alcoholic drinks, the mortality was higher in moderate users than in light users or abstainers, and that the mortality is much higher in excessive users

than in moderate users. It must be borne in mind, however, that these statistics have no bearing on the use of alcohol in therapy.—(*Jour. A. M. A.*, April 7, 1923, p. 1007).

A RAPIDLY ELIMINATED DIGITALIS BODY.—At the request of the Council on Pharmacy and Chemistry, Dr. R. A. Hatcher undertook to elaborate a digitalis preparation that would be stable, that would contain a definite amount of the readily absorbable principle and that would be suitable, if possible, for intravenous administration. As a result of his work he has isolated a digitalis body which behaves unlike any constituent of digitalis heretofore described. A nearly fatal dose is eliminated within a few hours after its introduction into a cat. It remains to demonstrate the therapeutic value of this new digitalis preparation through the cooperation of the clinician and the pharmacologist. The intravenous administration of digitalis is rarely necessary if digitalis is properly given by mouth. For rare cases in which intravenous medication administration is indicated, it appears that Dr. Hatcher has prepared a drug whose action is less persistent than other digitalis preparations now available and which is simply and inexpensively prepared.—(*Jour. A. M. A.*, April 14, 1923, p. 1072).

NEPHRITIN (Reed and Carnrick) was reported on by the Council on Pharmacy and Chemistry in 1907. The following is a summary of this report: The advertising claims for Nephritin are based on the theory that certain granules in the renal cells, called "grains of segregation," and claimed to have been observed microscopically, carry on the secretion of urinary constituents and that a deficiency of them is the cause of nephritis. While Renaut, who formulated the theory, recommended as a cure for nephritis the maceration of fresh kidneys in physiologic sodium chlorid solution, Reed and Carnrick urged objection to the maceration and explained that nephritis represents all the action of the maceration, but is fifty times as potent. Nephritin is stated to be "the grains of segregation from the cortex of the pig's kidney, the renal connective tissue being eliminated". It appeared impossible that the microscopic structures claimed to be present in nephritin could be isolated as such from the connective tissues, and, on inquiry by the Council, no information on this point was to be had. Further, the firm presented no evidence for the claimed action of nephritin or for the claim that it was fifty times stronger than the maceration.—(*Jour. A. M. A.*, April 21, 1923, p. 1167).

THE TREATMENT OF SYPHILIS.—The general view is that neither mercury nor arsphenamin positively cures in cases in which the disease has existed long enough to become well established as a systemic disease, but that they both tend to cure and that both are valuable in treatment. It is the general opinion of syphilologists that when chancres are seen that are unmistakable, these cases should be vigorously treated and that there is a good chance of aborting the disease at this time. If early cases are not treated until the Wassermann reaction has become positive there is a difference of opinion as to treatment. There are syphilologists who believe that these early cases are better treated by mercury alone until the patient has had an opportunity to develop all the immunity of which he is capable. After the patient has established all the resistance of which he is capable, these syphilologists would treat with mercury and arsphenamin. It is becoming increasingly apparent that the advantages of the new method of treating syphilis in which arsphenamin plays the larger part are by no means certain. The trend of the last few years has been in the direction of placing more reliance on mercury and the older methods in the treatment of syphilis.—(*Jour. A. M. A.*, April 21, 1923, p. 1167).

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XVI

JUNE 15, 1923

NUMBER 6

ORIGINAL ARTICLES

THE RIGHTS AND DUTIES OF THE SURGEON*

MILES F. PORTER, M.D., F.A.C.S.
FORT WAYNE

Never was there a period of unrest, pronounced and universal, such as the world is experiencing today. Never since history was first written has the call to duty been more imperative than it is today. This call goes out to every individual and to all associations of individuals alike, whether they be social, political, professional or commercial. Opportunity is proportionate to responsibility. The world needs today as it never needed more the service of each citizen and is calling to each of us to do not "our bit" but our *best*. The medical profession offers its votaries opportunities for service not excelled by any other vocation and equalled by but few, and a burden of responsibility commensurate with the opportunity. Because I believe that you agree with me in the truth of the foregoing statements I venture to ask you to permit me even in this day of rampant reformers and reforms to present for your consideration a few thoughts on "The Rights and Duties of the Surgeon."

The rights and duties of the doctor are dual in character. He has extended to him the rights and privileges common to all citizens, and in addition thereto certain rights and privileges not common to all citizens but peculiar to doctors because of their special knowledge and training. Special privileges always imply special duties. So the surgeon has imposed on him the duties common to all, plus those entailed by his professional privileges. These duties divide themselves quite naturally into three classes—his duty to his patients, his duty to his profession and his duty to the public.

It is important to remember, also, that a surgeon's duty is modified by his position in the profession. A surgeon occupying the position of a private in the rear rank may be justified in doing things which done by a leader of the profession in the capacity of a teacher would, to say

the least, be open to adverse criticism and in the writer's opinion reprehensible in the extreme. Membership in this Association is a peculiar privilege and entails upon every one of us an added obligation. Let me illustrate my meaning and emphasize the importance of the point by relating an actual occurrence, giving all of the essential facts but avoiding specifications that could do no good and might be harmful in effect. A leader in surgery was holding a clinic under the auspices of an influential society of surgeons before an audience of surgeons. One of the patients was a pregnant female who needed some perineal plastic work done. This work being finished the surgeon proceeded to remove the product of conception from the womb via an abdominal hysterotomy, because, he said, he feared the result of labor on the recently repaired perineum. One of the surgeons in the audience asked the operator why he did not wait and do the hysterotomy when the child was viable. His reply was: "I always follow the advice and wishes of the family physician in these matters." Now perhaps there can be no question but that the surgeon giving this clinic was entirely within his legal rights. But I submit that the propriety of such a demonstration under the circumstances as related is open to grave question and deserving of more than passing attention.

Because some of the questions involved are similar, I wish here to speak of another matter which in the opinion of the writer deeply concerns the surgeon. I realize the subject is a delicate one, but feeling as I do about it, it would be cowardly in me should I refrain from speaking about it on this occasion. I refer to the attitude of the Roman Catholic Hospitals concerning abortion. This operation is strictly forbidden in these institutions, and it is the opinion of a respectable number of surgeons that this attitude results not infrequently in unnecessary deaths. With a view to presenting this topic for consideration at this time the writer consulted a priest, highly esteemed in the church and the community in which he lives, and a man whom he is proud to number among his friends. In the course of the conversation the following hypothetical question was asked him:

*Presidential Address delivered before the Western Surgical Association, Minneapolis, December 8, 1922.

"Father, supposing you were called in consultation in a case wherein the patient was a catholic woman, pregnant for three months, near death because of toxemia; and supposing the attending physician should tell you that in his opinion, supported by two or three consultants, that the patient would die unless the womb was emptied, but that if this were done the chances for her recovery would be good; and supposing further that the attending physician should say to you that he could deliver this product of conception alive so that it could be baptised. Under these circumstances, Father, would you sanction the proposed operation?" His answer was, "Personally I would, but you understand that this is not given as an official opinion." In the light of these facts it would seem not impossible that the differences now existing between the Church, the medical profession and the law concerning this matter might be overcome, and some at least of these unnecessary deaths prevented.

There is good reason for the belief entertained by many surgeons that the strenuous efforts made during the recent past to systematize and standardize professional activities have not been entirely harmless. It is argued, and not without reason, that standardization lends itself especially to the production of quantity rather than quality. A highly standardized concern may be the ideal for a Ford factory, but one would not expect such a factory to produce a Rolles-Royce. "Variety is the consequence of freedom, and this slight but radical diversity of souls in turn makes freedom requisite." (Santayana.) Mechanical methods are all right in the making of machines, but the aim of medical training is—medical men.

Speaking of the influence of standardization on newspapers an editorial in the *Independent* says: "Newspapers have become more and more standardized, and with this has come the realization that it is possible to make money by being a sheep and following—morally speaking—a goat." Art and artists of the highest type are not children of systemization and standardization, but rather are they the children of liberty and opportunity. To my mind the ideal medical school or hospital is the one giving the student abundant opportunity, with liberty limited only by the bounds of reason. The chief aim of the educator should be rather to get his pupils to make a right start than to lead them to a right conclusion. Richard Cabot puts it thus: "In all work and all education the worker should be in touch with the distant sources of interest, else he is being trained to slavery and not to self-government and self-respect." In a degree standardization and sterilization are synonymous in that a standardized thing can not grow—it is done, it is dead. Standardization is a potent factor for good but not entirely harmless except when applied to perfect things. When we have

perfect doctors, perfect hospitals and perfect medical schools we may standardize to the limit, but until then we may not without risk give our enthusiasm for standardization unbridled rein.

In the minds of many men whose experience has been large and whose opinions are valuable there is the thought that today too much stress is put on laboratory aids to diagnosis and as a consequence that the older methods have come to be under-valued, with the result that the average of diagnostic ability, to say the least, has not been improved as it might have been. It is decidedly doubtful if the desuetude of the old plan of personal contact between teacher and student has been entirely beneficial. I have a strong feeling that the vogue of the preceptor in medical education might be rejuvenated with great benefit. It would be hard to overestimate the value to the student of personal contact with the teacher and patient. And for this reason alone, and of course there are others also, the wisdom of the banishment of the didactic teacher is open to grave question. To relegate him somewhat to the rear is no doubt quite the proper thing, but he still is and perhaps will ever be a vital factor in medical education. In his presidential address before the American Surgical Society last spring, Dr. Finney well says, "Medicine has one big job, the prevention and alleviation of disease. Medical schools should devote their efforts to training those capable and willing to do this job." A barn can be painted by machine, and even so-called pictures, but a portrait with character and soul, a landscape redolent with the breath of spring or one filled with the still, sweet sadness of autumn, can only be created by an artist—a man whose whole soul is bent on drawing the "thing as he sees it, for the God of things as they are." "Pot-boiling" is perhaps only a misdemeanor in most arts, but in the art of medicine it is a crime. Medicine is a glorious art, a great service but a bad business. One hesitates to cast aspersion upon his own profession, but if we render a good account of the talents with which we are endowed we may not, ostrich like, bury our heads in the sands of selfishness and refuse to hear and see the wrongs perpetrated in her name by those professing to be her true and devoted disciples. The later years have been fertile with the formation of groups and clinics, created ostensibly in the interest of better service, though many of them are the offspring of that prolific curse, commercialism, and under these names, because of their present popularity, many surgical sins are sheltered. Unnecessary operations are being done daily, and with equal frequency operations are attempted by those entirely unfit, with a resulting morbidity and mortality which, however great or limited, is appalling because it is unnecessary

The American Medical Association and the American College of Surgeons have done and are still doing great good in their efforts to eradicate this and other evils from the profession, but this work requires united effort on the part of all, both individuals and associations, if we are to make such progress as the urgency of the matter demands. It would seem quite within the bounds of reason to believe that a concerted effort on the part of surgeons through surgical societies of recognized standing and influence might do much to mitigate this evil. Would it not be in the best interest of all to require a certificate of fitness of every one desiring to practice a specialty? Is it any more logical to move upon the theory that the degree of M. D. is sufficient evidence of the ability of its possessor to practice medicine than it would be to accept the degree of A. B. as sufficient evidence of the fitness of all the possessors thereof to teach school? It being conceded that the field of medicine is much too broad even to be grasped, much less mastered by one mind, and considering the abundant opportunities now offered for special training, is the time not ripe for requiring special licenses for permission to practice any of the recognized branches of medicine and surgery?

The subject of state medicine lately has been receiving more than the usual attention, and honesty compels one to say that some of the utterances on the subject do not reflect great credit upon the profession. It is well known, of course, that through the avenues of state medicine the medical profession has given to the world its most valuable gifts—gifts compared with which those bestowed through individual effort are insignificant. State medicine is and has been for decades an established fact. It is a growing institution throughout the enlightened world, and one second in importance to none. In fact there is no more reliable measure of the intelligence of a community than the rank it has achieved in state medicine. Whether the development of this beneficent institution continues along correct lines and with satisfactory speed depends largely upon the attention given to it by the teachers and leaders in our profession. In the discussions already had upon this topic there have been three notes especially loud: 1, fear for the doctors' business; 2, danger from the loss of incentive to the individual; 3, danger to the public from inefficient service. The paramount question as we all know is—the public good. Does the public good demand that the activities of the state in matters medical be extended and amplified, and if so, in what direction and how far? If this question is answered in the affirmative, then the other questions become practically negligible. In relation to the question of efficiency we constantly should bear in mind that democracy,

extravagance and inefficiency are close kin. No one doubts that a first class autocratic or monarchical government is more efficient than a first class democracy—but which is the most desirable? We may not enjoy to the full the roses of democracy without some risk from its thorns.

We have with us still the anti-vivisectionists, anti-vaccinationists, faith healers, the latter variously named but all of one sort—bad, chiropractors, osteopaths, and other like cults and sects too numerous to mention, and if the generally conceded birth rate of the class from which these ranks are recruited and from which they draw sustenance, "one a minute," continues we may expect to have them, like we have the poor, "always with us." It would be almost impossible to overestimate the harmfulness, actual and potential, of the pernicious activities of these and similar bodies. To curtail the havoc they do is a solemn duty of the medical profession.

As suggested in the beginning of this paper the duties of the surgeon are not confined to his service to his patients and his profession. Certain public duties rest particularly heavy upon him because of his training and experience. Who is better fitted than he to give wise suggestions for the solution of many social problems? In fact many of these problems are in essence medical, and the service of medical men as essential to their correct solution as is the service of an engineer in the proper construction of a great bridge. It would be well nigh impossible to over-estimate the benefits to this country which would come from a well-organized and well-manned national public health bureau, with coordinated and correlated state, county and city branches. Such a beneficent organization as this would be an established fact within a few years if the medical profession would make an earnest and concerted effort to get it.

In the creation of an international code, with a view to world peace, what group of men are better equipped to give advice and direction than are those in the medical group? Many of the leaders in medicine were actively engaged in the late war, and the experience thus gained, plus their medical training, equip them to be advisors of the first class on problems of peace and war.

To succeed in any public movement it is necessary, especially in a government such as ours, to get the people behind it. In the past the medical profession has held itself too much aloof from the laity. This aloofness was due no doubt to high regard for ethical conventions, very worthy in essence and to modesty, which is a meritorious attribute, but it should be remembered that the public good sometimes demands that conventions be cracked and has decreed that modesty may not marry either pride, prurience or cowardice because of their near relationship. Latterly we have been doing much better in this matter, and the results have been very gratifying, but the

communion should be still closer and more continuous. Revivals and revolutions indicate remissness. Neither are necessary in communities that contain even a minority of wide awake, energetic workers who are continually on the job. There may not be entire agreement on all matters or methods concerning the improvements needed, but we are all agreed that there is urgent need for improvement in medical service, both in its personal and public aspects; that there are many avenues of approach to this improvement, some of which are well known only to members of the medical profession; that there are needs for improvement in other lines of service with which we are not directly connected but concerning which we are equipped to give valuable advice and information; that the maximum of success requires concerted action by all classes concerned; but that all action requires initiation and that this initiation is the job of the leaders and teachers in the profession. This association is a representative body of this group.

As your president then, I ask that there be a group chosen from the members of this association to act in concert with groups chosen from other influential medical organizations in an effort to achieve that improvement in service which, if achieved, would make this world a better place in which to live. If we stop and consider thoughtfully what an enormous potential power for good such a body of men would be in this country in advising and directing both governmental and individual activities we will, I think, act promptly in the matter. Moreover, that such a body created for the purposes contemplated might become the nucleus of an international body of like character and aims is, in my opinion, not an idle dream, but a conception worth working for. We have reason to be proud of the work already accomplished by our profession, but we must put the sin of satisfaction behind us and go forward to the great conquests that still confront us, with hope, love and courage our guide, and the "joy of battle" our sure reward. The world needs the truth as it never needed it more. It is our blessed privilege to assist in broad-casting to the world this thing of transcendent power and beauty, not half hidden by the flimsy veil of hypocrisy, nor clothed in the soft verbiage of sophistry and compromise, but in all its pristine beauty and strength—naked and unafraid, the real truth that "wears no mask; bows to no human shrine; seeks neither place nor applause; but only asks a hearing."

DIAGNOSIS OF DUODENAL ULCER*

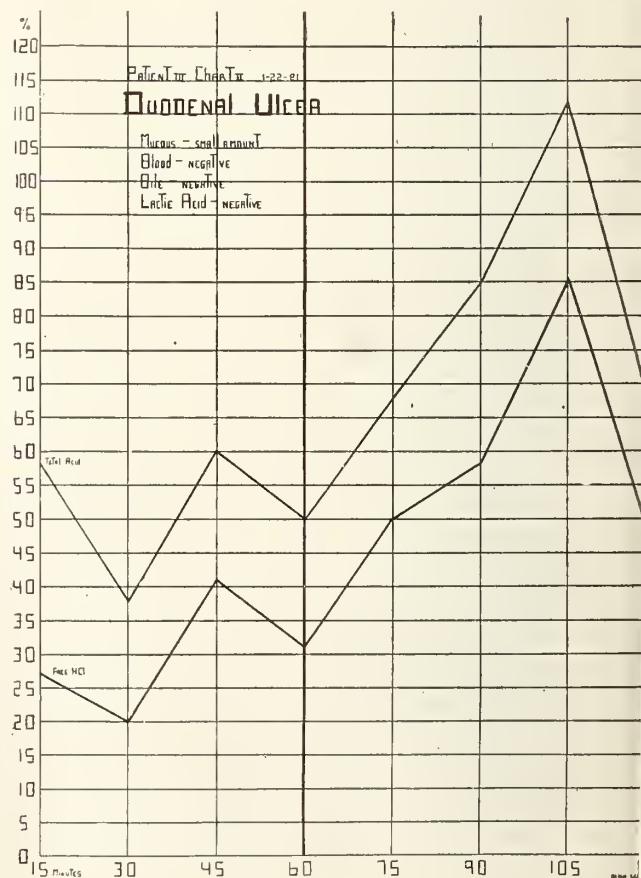
FRANK W. FOXWORTHY, M. D.

INDIANAPOLIS

In appearing before the Surgical Section I hope you will not consider me presumptuous, knowing

my own limitations. It is with no intention to give didactic instruction, but rather as a liaison officer to coordinate the different methods of diagnosis.

At the joint meeting of the Surgical and Gastro-Enterological Sections of the American Medical Association in St. Louis this year, the leading surgeons ⁸⁴ ⁹⁴ of this country were in most delightful harmony with the internists in regard to the treatment of duodenal ulcer. This harmony should extend throughout all diagnostic work as unharmonious work between surgeons and internists promotes the exploitation of the irregular healers. Never before in Indiana have we had such hordes of individuals posing as capable of treating the ailments of humanity. The medical profession of this State have been insulted by the opening of so-called "Chiropractic Colleges" in Indianapolis, Fort Wayne and other places, and many of our Association have been circularized by these institutions offering post graduate courses to us. It is indeed a severe criticism on the profession that we have allowed such a hoax to be perpetrated upon ourselves and our patients. On this account we must have no differences in regard to the diagnosis of one of the great diseases of mankind, and I humbly offer the following suggestions from the experience of



*Presented before the Section on Surgery of the Indiana State Medical Association at the Muncie session, September, 1922.

twenty-five years' medical practice, from four years' work on this paper in the medical libraries of Indianapolis, Chicago, and the Surgeon General's Library in Washington, D. C. To the executives of the above libraries and to Dr. Morris Fishbein, Assistant Editor of the Journal of American Medical Association, and to Dr. A. M. Cole, Dr. Raymond C. Beeler and Dr. J. H. Warvel I offer my sincere appreciation for their help.

COOPERATION

The patient must assist in giving a complete history of his case. Example: Mrs. W. C. came to me September 13, 1920, with the usual symptoms of ulcer, as shown by her history. She refused to have an x-ray examination made and refused to take treatment. In April, 1922, her family physician treated her for a supposed abdominal hemorrhage. A consulting surgeon, after a most careful examination, operated on her for an extra-uterine pregnancy with abdominal hemorrhage. The patient failed to tell either of the physicians of the previous gastro-intestinal symptoms, and at the operation no blood was found in the abdominal cavity. A few hours after the operation she passed a large quantity of blood per rectum, at which time I was called to see her. Considering my previous experience with her I made a diagnosis of duodenal ulcer. The autopsy showed a duodenal ulcer. Both the surgeon and general practitioner assured me that at no time did she or her husband ever mention any gastro-intestinal symptoms.

Cooperation of the family physician. He may have known the patient and family for many years and his assistance in arriving at a correct diagnosis is most essential.

Cooperation of the family. Many times the members of the family can refresh the patient's memory in regard to the previous history. The cooperation of the technician, who makes the fractional analysis and the fecal analysis, the radiographer, who can settle many obscure cases by a wise interpretation of the films, and the cooperation of the nurse who should watch the stools for blood, is necessary. The cooperation of the surgeon must be assured as he too must depend upon the cooperation of his assistants and his active help is often times needed when in doubt in regard to a perforation or hemorrhage.

X-RAY

No matter at what time the history is taken or the physical examination made, the x-ray should be the first scientific method used in diagnosing ulcer,^{3 13 24 92} A careful study of the attached bibliography will show the tremendous importance of the use of the x-ray. A short stay at the Mayo Clinic recently favored me with the importance of seeing hundreds of cases so diagnosed by the x-ray⁹⁶. Whenever I fail to

give it its proper value, eventually I find that I have been mistaken.

Example: Mr. H. H. B., October 4, 1919. Although he had pain four or five hours after eating, hyperacidity, relieved from pain by food, and although the x-ray showed some signs of pyloric spasm, there was no six hour residue, and although the interpretation was a possible ulcer, a kink at the hepatic flexure and marked intestinal stasis led me to believe the latter was the primary trouble. He was relieved for several years by taking the usual treatment for intestinal stasis, but recently upon a recurrence of his previous symptoms, was operated on in the Mayo Clinic. A report from them showed a duodenal ulcer that had perforated, probably a long time ago, and the adhesions thereby produced had caused the stasis. The only accurate differentiation between gastric and duodenal ulcer is the x-ray.

BLOOD

This may be per orem or per rectum. If by the latter, of course it is usually partially decomposed. This may be found by the patient, family, nurse or physician, or by the chemist who makes the fecal analysis. Many of the authorities that I cite believe that the finding of blood is the *sine qua non* of ulcer diagnosis^{15 18}. This showing of blood even in cases with hemorrhage, is in itself not a positive diagnosis for it may be from cirrhosis of the liver, varicosities of the esophageal veins, aneurisms penetrating into the stomach, a "weeping" mucous membrane, or even adhesions around the duodenum⁶. One case showed a healed duodenal ulcer, yet had blood constantly in the stomach⁹. This blood, when aspirated through the duodenal tube, is a sure indication¹⁵.

FRACTIONAL ANALYSIS

This method is far more exact than the former one of removing a single meal at the end of a certain period of time. A large percentage of cases show the rise in acidity, beginning about one hour after eating and usually continuing for one to two hours. This in itself is not pathognomonic of ulcer, as it may occur in gall-bladder disease, adhesions and other conditions, but it is one of the valuable aids we have; and at the same time the chemist should examine for blood and lactic acid. The presence of the first and the absence of the last are both indicative of ulcer.

FECAL ANALYSIS

This is most important as it will show the presence or absence of blood, and on the meat free diet even occult blood is significant.

HISTORY OF THE CASE

^{31 90} The old adage that the history is everything, the physical examination nothing, is obsolete⁸. The history is most important but is worthless if not combined with all the laboratory findings.

Example: Mr. S. Referred to me in July, 1922, with a history of fifteen years' attacks of gastric and intestinal disease. Pain several hours after eating, relieved by food, constipation present, pain always in epigastrium, no jaundice. X-ray showed a tumor in the mediastinum and gall-bladder pathology with the stomach and duodenum normal. Operation showed carcinoma of the gall-bladder with extensions to the mediastinum.

The usual history shows the pain sharp and boring in character from two to five hours after eating, lasting until food or alkalines are taken. The pain may be reflected to the spinal column or different parts of the abdomen; rough and acid foods producing more pain, which is accompanied by eructation of gas, nausea and emesis. Constipation is usually present. These attacks are often times over a long period of years, the chronicity and periodicity being valued by some as pathognomonic of this disease ⁸². These attacks are often called indigestion and pain is not always present. Sometimes even a tender spot would be hard to find, especially if the stomach be empty ⁸³.

Example: Miss R., August 28, 1922, came for relief from persistent vomiting which came on from two to three hours after eating. No pain was complained of, even upon deep pressure. There was only one tender spot at the left of the umbilicus. She first had indigestion a year ago and the attacks of vomiting came on three weeks ago. The x-ray showed hyper-peristalsis and a pyloric spasm with a defective duodenal cap. Pain was felt upon deep pressure over the duodenum when it was filled with the Barium mixture, but it had not been complained of before at any time. The gastric analysis showed an exceedingly high acidity, both total and hydrochloric, at the end of two hours. Blood was present. She is now under a modified Sippy treatment and has no more vomiting. With the history of the case heredity is very important also, as more than 50 per cent of my cases show gastric or intestinal disease in the immediate family.

PHYSICAL EXAMINATION

This is relatively unimportant. If the above mentioned methods have been used in the diagnosis of this disease, I would much prefer to take the conclusions arrived at as final rather than to allow any part of the physical examination to mislead me. These ulcer cases are usually well nourished and often quite fat and I confess my inability to diagnose an ulcer in a fat abdomen by palpation and percussion, especially if the patient is lying on his back. A tender spot, pain, or rigidity in the right hypochondrium may mean ulcer, gall-bladder or liver pathology, appendicitis, pancreatitis, carcinoma, adhesions, etc.

In making the physical examination, may I suggest a new method of palpation of the duodenum which is based on the assumption that the pyloric end of the stomach and the first portion of the duodenum are freely movable while the gall-bladder is not. The examiner should have the patient lying on the right side, near the left side of the bed or examining table. He should place his right hand under the patient at the level of the umbilicus and, reaching forward and upward, should have the tips of his fingers over the approximate position of the duodenum. The patient should then slowly turn over on his face; by this means the duodenum, unless adherent, should move downward toward the examiner's fingers by force of gravity, and thus be easier palpated. It thereby drops away from the gall-bladder and out of its normal cul-de-sac, or position, and, if the patient is not too fat, palpation may reveal tender points not found otherwise, and even in some cases I have found tumors by this method, **too small to be palpated** when the patient is lying on his back. There may be nothing new or original in this method, but I have been unable to find it described elsewhere.

In addition the patient may also be examined while standing, as an abdomen that protrudes considerably may be more easily examined in this position ⁸⁵. The usual examination for gall-bladder disease should be made by careful palpation and percussion over the gall-bladder region and by the usual method of hooking the fingers up under the ribs in the region of the gall-bladder while the patient is making deep respirations; but no symptom elicited is absolutely pathognomonic ³. In a thin person a pyloric spasm may be detected by briskly tapping the abdomen over the stomach (³⁰).

PERFORATIONS

⁶ ²⁵ If perforations should occur, then the examination of the abdomen becomes one of the most essential things. The board-like rigidity of the muscles cannot be imitated by anything except acute pancreatitis, which, of course, is quite rare. The pain is sudden, acute and stabbing. Sometimes it is called "atrocious" ⁷⁰ and is accompanied shortly after by the usual symptoms of peritonitis and sometimes the usual symptoms of hemorrhage, with weakened pulse, pallor, perspiration, anxiety, etc. Sometimes pleurisy and pneumonia simulate it perfectly, but the increased respiration and temperature, usually over 102 degrees in the latter, is a pretty good indication that the trouble is in the chest ⁴⁸.

HEMORRHAGE

² ³ As shown under the sub-heading of Blood, hemorrhage is not in itself a sure sign of ulcer as it occurs in less than one-half of all cases ²⁰. A diagnosis of ulcer must not be made on hemorrhage alone. ⁶ After the hemorrhage has

been relieved and the general condition of the patient is such that there will be no damage done in going through the above routine, the examination should then be started and the diagnosis made only after a complete x-ray and fractional analysis. A Wassermann test may assist greatly in the after conduct of the case.

DIFFERENTIAL DIAGNOSIS

Recurring attacks with seemingly absolute relief in intervals is customary; the worst attacks seem to appear in the winter. In pancreatitis the pain is more on the left side. Usual means for controlling vomiting do not control vomiting of pancreatitis. Pleurisy, pneumonia and gall-bladder disease have been spoken of before⁴⁸. Einhorn's silk thread test is not conclusive. Lavage relieves both gall-bladder disease and ulcer. Vomiting may be the same in both. Heart burn, nausea, vomiting and fullness appear to be present oftener in gall-bladder disease attacks than they are in duodenal disease. Visible gastric peristalsis is a sure indication of pyloric spasm or stenosis. Hypercythemia is found in 83 per cent of duodenal ulcer cases³. Gall-bladder disease is mostly in females with duodenal ulcer, mostly in males³. Negative x-ray findings are more apt to be found in duodenal disease than in gastric disease. The persistence of a case over a long period of years is more indicative of duodenal than gastric disease. Physiological doses of belladonna will relieve a spasm that is not produced by an ulcer. Often duodenal ulcer is diagnosed as hysteria, nervousness or nervous dyspepsia. In infants diagnosis is made by bloody or tarry stools³⁴. The pain in the duodenal ulcer usually radiates to the right, in gastric to the left. It is more constant in duodenal. Opiates cloud a diagnosis. Chronic appendicitis may give practically all the above symptoms but between the attacks the appendix is always tender⁴⁰.

If the above suggestions meet with your approval I shall be much pleased; but if by following them you fail to diagnose duodenal ulcer, please remember that 75 per cent of duodenal ulcers found after death have not been diagnosed in life¹⁹. Fifteen years ago diagnosis of duodenal ulcer was an accident⁵¹. More ulcers are healed by themselves than are found⁵³. I sincerely hope that I have proved to you that we need more cooperation.

CURRENT LITERATURE, 1913-1922

This is not all the literature which was examined in the Indianapolis City Library; the Library of The Indiana University School of Medicine; the Eli Lilly Library; the Library of the Journal of the American Medical Association; the John Crerar Library, Chicago; the Library of the Surgeon General, U. S., Washington, D. C.; but all references given are pertinent.

1. Jona: *Med. Australia*, 1, No. 16, p. 316.
2. Beck: *Arch. Diagnosis*, 10, No. 4, p. 307.
3. Gutman: *Arch. Diagnosis*, 10, No. 4.
4. Friedman: *Arch. Diagnosis*, 10, No. 1, p. 14.
5. Ives: *Arch. Diagnosis*, 10, p. 286.
6. Jones: *J.M.A.*, Georgia, 8, p. 144.
7. Wulff: *Mitt. a.d. Grenzgeb. d. Med. u. Chir.*, p. 79, 1916.
8. Van Amstel: *Mitt. a.d. Grenzgeb. d. Med. u. Chir.*, p. 94, 1916.
9. Nowaczynski: *Deutsch. Med. Wchnschr.*, 42, p. 94.

10. Boaz, I.: *Deutsch. Med. Wchnschr.*, 42, pp. 1, 33.
11. Moll: *New York M. J.*, 110, p. 934.
12. Mix: *Med. Clin.*, p. 369, 1915.
13. Carmen: *Am. J. Roentgenol.*, p. 252, 1916.
15. McNeil: *Am. J. Med. Sc.*, 151, No. 1, p. 106.
16. Holmes: *Boston M. and S.J.*, 174, No. 15, p. 531.
17. Carmen: *J.A.M.A.*, 66, No. 17, p. 1283.
18. Wulff: *Hospitalstidende*, 58, No. 5, p. 105.
19. Mayo, W.J.: *J.A.M.A.*, 64, p. 2036.
20. Peck: *Ann. Surg.*, 61, No. 4, p. 406.
21. Muller: *J.A.M.A.*, 64, p. 566.
22. Mills: *J.A.M.A.*, 64, p. 1873.
23. Hertz: *Ugesk. f. Laeger*, p. 1801.
24. Carro: *Medicina Ibera*, Madrid, 5, No. 58, p. 263.
25. Buchbinder: *J.A.M.A.*, 72, No. 15, p. 1075.
26. Editorial: *J.A.M.A.*, 70, No. 12, p. 849.
27. Carlson: *Am. J. Physiol.*, 45, p. 81.
28. Hardt: *J.A.M.A.*, 70, No. 12, p. 837.
29. Field: *Boston M. & S. J.*, 178, No. 7, p. 220.
30. Sippy: *J.A.M.A.*, 64, No. 20, p. 1625.
31. Rovsing: *Hospitalstidende*, 60, No. 27, p. 645.
32. Fortmann: *Cor.-Bl. f. Schweiz. Aerzte*, 47, No. 40, p. 1349.
33. Bine: *J.A.M.A.*, 68, No. 13, p. 1315.
34. Brown: *Canad. M.A.J.*, 7, No. 4, p. 320.
35. Homans: *Boston M. & S. J.*, 175, No. 19, p. 665.
36. Dahl: *Hygiea*, Stockholm, 78, No. 18, p. 1408.
37. Patry: *Rev. Med. de la Suisse Rom.*, 36, No. 9, p. 574.
38. Roeder: *Nebraska M.J.*, p. 76, (Sept.) 1916.
39. White: *Boston M. & S. J.*, 174, No. 18, pp. 633, 674, 710.
40. Levison: *Interstate M.J.*, 23, p. 986.
41. Smithies: *Interstate M.J.*, 23, p. 845.
42. Crispin: *Interstate M.J.*, 23, p. 890.
43. Akerlund: *Hygiea*, Stockholm, 81, No. 10, p. 449.
44. Balfour: *J.A.M.A.*, 73, No. 8, p. 571.
45. Lichty: *New York State J.M.*, 18, No. 11, p. 443.
46. Hammond: *J.A.M.A.*, 71, No. 21, p. 1769.
47. Dowden: *J.A.M.A.*, 71, No. 14, p. 1164.
48. Brenner: *Med. Rec.*, 95, p. 215.
49. Deaver: *Med. Rec.*, 91, p. 126.
50. Einhorn: *Med. Rec.*, 91, p. 236.
51. Friedman: *Med. Rec.*, 91, p. 168.
52. Turk: *Med. Rec.*, 91, p. 169.
53. Bassler: *Med. Rec.*, 91, p. 126.
54. Cole: *Med. Rec.*, 92, p. 128.
55. Sonnenburg: *J.A.M.A.*, 62, p. 1502.
56. Friedman: *Med. Rec.*, 85, p. 20.
57. Bier: *Deutsch. Med. Wchnschr.*, 39, p. 51.
58. Hartmann & Lecene: *J.A.M.A.*, 62, p. 1500.
59. Mayo, W. J.: *J.A.M.A.*, 62, p. 1500.
60. Payr: *J.A.M.A.*, 62, p. 1500.
61. Murphy: *J.A.M.A.*, 62, p. 1500.
62. Moynihan: *Brit. M.J.*, 2, No. 3076, p. 765.
63. Hunter: *Transactions of Life Ins. Med Directors*, p. 136, 1919.
64. Ohnell: *Acta Medica Scandinavica*, Stockholm, 52, No. 1, p. 1.
65. McClure & Reynolds: *J.A.M.A.*, 74, No. 11, p. 711.
66. Soupault: *Les Dilatations de l'Estomac*, Paris.
67. Hurst: *Brit. M.J.*, 1, No. 3095, p. 559.
68. Smithies: *J.A.M.A.*, 74, No. 23, p. 1555.
69. Troell: *Deutsch. Zschr. f. Chir.*, 149, No. 1-2.
70. Arch: *Franco-Belges de Chir.*, 23, p. 508.
71. Barsony: *Arch. f. Ver-Krank.*, 28, p. 275.
72. Crile: *Ohio S. Med. Jr.*, 17, p. 611.
73. Rocha Vaz: *Brazil-Medico*, 34, p. 183.
74. Meunier: *Presse Med.*, 28, p. 665.
75. Singer: *Arch. f. Ver-Krank.*, 28, p. 131.
76. Parturier: *Progress. Med.*, 36, p. 493.
77. Parturier: *Rev. de Med.*, 38, p. 214.
78. Bassler: *N.Y. Med. Jr.*, 109, p. 751.
79. Eggleston: *J.A.M.A.*, 75, p. 1542.
80. Haudek: *W. Klin. Wochen.*, 34, p. 159.
81. Faber: *Ug. f. Laeger*, 83, p. 491.
82. Wallace: *J. Mo. State Med. Assn.*, 18, p. 377.
83. Mayo, C. H.: *Am. of Surgery*, 73, p. 328.
84. Mayo: *N.Y. J.A.M.A.*, 79, p. 19.
85. Anders: *J.A.M.A.*, 78, p. 581.
86. Jonas: *Med. Klinik*, 18, p. 23.
87. Meunier, P. *Medicale*, 29, p. 536.
88. Otvos, K. *Wchn.*, 1, p. 362.
89. Gaither: *J.A.M.A.*, 79, p. 618.
90. Wilensky: *Am. of Surgery*, 73, p. 420.
91. Bloch: *Ill. M.J.*, 39, p. 209.
92. McClure and Reynolds: *Bost. M. and S. J.*, 173, p. 321.
93. Palefski: *J.A.M.A.*, 75, p. 1547.
94. Bevan: *J.A.M.A.*, 79, p. 22.
95. Brown: *J.A.M.A.*, 79, p. 29.
96. Carmen, Jr. *of Radiology*, 3, p. 163.

DISCUSSION

DR. W. H. FOREMAN (Indianapolis): As I understand the author's paper, he is pleading for cooperation and coordination—cooperation of the physician, patient, family, the laboratory technician, the x-ray technician and the surgeon; coordination of the symptomatology derived from

the various methods of investigation, such as history and physical examination, clinical test outs, laboratory and x-ray findings.

We may differ as to the relative value of the different methods of investigation. I am inclined to think that the history and physical examination is of first importance; next the clinical test outs and clinical laboratory findings, and lastly and more corroborative, the x-ray observations. The author is correct in saying that any one of these methods alone gives little dependable information, and even with complete and careful coordination of the symptomatology derived from all the methods of examination, more ulcers remain undiagnosed than diagnosed. I am just equally as confident that many conditions in the upper abdomen are diagnosed as ulcer which are not ulcer.

While the author has designated his paper as "Diagnosis of Duodenal Ulcer," there is no distinction in symptomatology between duodenal and gastric ulcer, the only difference being in the prognosis.

The symptomatology from ulcer from all methods of diagnosis can be classified under three heads, viz., secretion, sensibility and motility.

Too much reliance in the past has been placed on the analysis of gastric contents. The old diagnostic combination of characteristic ulcer history, negative gastric physical findings, and hyperacid stomach contents may mean ulcer or various other conditions. So many extragastric influences modify the secretory function of the stomach that the determination of acidity per cent is of very little value in the diagnosis of organic, gastric or duodenal disease or dysfunction.

Epigastric distress or pain may or may not mean disease of the stomach or duodenum. By far the greater per cent of all gastric and duodenal symptoms are functional, i. e., have no organic basis in the stomach or duodenum. Functional disturbances of gastro-duodenal sensibility simulate those of organic gastric or duodenal disease, the differential diagnosis requiring the closest study, observation and analysis.

The greater per cent of all disturbances of gastric and duodenal motility are functional, i. e., have no organic basis in the stomach or duodenum, so that in the study of gastric and duodenal motility it is essential to consider the various functional and organic conditions that may disturb the normal gradient of forces in the gastro-intestinal tract, and more especially as this disturbance affects the stomach and duodenum.

We are familiar with the vomiting or reverse peristalsis in acute gall-bladder disease and in acute appendicitis. Lower grade reverses are observed in low grade irritation of these same structures or in colitis, spastic constipation, rectal or pelvic disease, etc. It is here that the physical examination is of primal importance, not so much

in finding a tender spot in the epigastrium as in the determination of the negative and positive physical findings in the various organs of the body.

The fluroscope is of inestimable value in the study of gastro-intestinal motility, and yet the fluoroscope can show up only disturbances of motility, which is of very little value in diagnosis except that the fluoroscopic findings be checked up with the physical findings and with the findings of the various other methods of diagnosis. In case fluoroscopic examination suggests crater or puckering deformity or motor interferences, roentgenograms are indicated for detailed and graphic records. It should be remembered, however, in the examination of movable viscera, that the roentgenographic findings are rather confirmatory and the absence of findings in the roentgenogram is not even negative.

While I constantly use the x-ray and think it of great value in the diagnosis of gastro-intestinal conditions, yet the x-ray findings, unless coordinated with all the other findings from the various methods of examination, and unless properly interpreted by the x-ray man and the diagnostician, are prone to be misleading rather than helpful in the diagnosis of gastric and duodenal ulcer.

DR. MILES F. PORTER, SR., (Fort Wayne): In these days of automobiles, telephones and street-cars, most of us have become abominably lazy. We do not use the means of locomotion that God gave us if we can avoid it, and with all our instruments of precision, laboratory methods of one sort and another, we are as a profession becoming pretty lazy in the matter of diagnosis. An athlete who insisted on taking a street-car whenever he wanted to go any place would soon find himself out of condition generally. So the practitioner of medicine who discards all of the natural methods of making diagnosis and depends unduly upon other methods, is apt frequently to fail. My point is this—that in careful, painstaking history, plus physical examination of the individual, we have the most reliable method of diagnosis of gastric or duodenal ulcer. Of course we must be close observers or we will make mistakes, but I want to insist that the best means we have of arriving at diagnosis in these cases is painstaking history and careful physical examination.

DR. H. O. PANTZER (Indianapolis): Clinically speaking, this class of cases will not find its more happy treatment until a common etiologic factor, namely, anatomical irregularities of form and faulty composite arrangement with the adjoining organs, is more fully understood. These irregularities are of two-fold origin—congenital and acquired. We should expect congenital deviations from the normal form to occur oftener

when we consider the intricate happenings incident to the embryological growth of these organs, and in symptomatic proof of their existence is the fact that search into the history of individuals afflicted with gastric and duodenal diseases will almost invariably reveal that as infants they were colicky and fretful. Such symptoms were then, and are now, commonly ascribed to poor quality of mother's milk, colds, fright, and what not, when in fact they indicate dysfunction owing to anatomical deformities. Nature in these cases first finds herself greatly stressed to function, but in time develops an accommodation and a tolerance for such irregularities, and the trouble becomes patent only in attacks which gradually lessen in frequency. But ultimately by the insult of unusual stress of function put upon these organs, or by the advent of infection of the stressed parts incident to bacteremic disease, there develops the crisis mentioned in the title of this paper.

The acquired anatomical deformities here in question are the result of injuries and diseases which cause flat chest, kyphosis, lateral curvature of the spine, inflammatory adhesions, etc., which in turn entail displacement and torsion of the organs, and again result in dysfunction associated later with complications of infectious and ulcerative processes. This view of the etiology will account for the obviously varied symptomatology present in different cases of the same affection.

Based on acceptance of this etiology, the conclusion is that we shall operate early and strive to do more than excise the ulcer—to correct the distorted anatomy. I have pursued this course for many years, and often instead of excising the ulcer I have simply trusted to cutting constricting bands and ligaments, with success warranting such procedure. I predict the day not far off when such anatomical irregularities will be detected and operated in the infant, when no complications exist, and that this operative procedure in many cases will be little more than snipping with the scissors a few peritoneal bands here and there.

DR. A. M. HAYDEN (Evansville): I have had a good deal of experience with these cases and I rely more and more on the history of the case dating back over several months or a year previous to the time the patient comes to me, and a thorough physical examination at the time I see the patient. I do not rely much on the x-ray. I have found it contradictory, even when interpreted by our best x-ray men.

A case came to me about a year ago, a man who had been under treatment with good physicians for a year previous. He had been sent to x-ray experts and given a clean bill of health as far as the stomach and bowels were concerned. When he came to me he gave a history of pain two or three hours after eating—eating would

relieve him; he also had occult blood in the stools. Stomach analysis showed practically a normal amount of acid, with quite a good deal of mucus and some blood; but you can find blood in the stomach contents without having ulcer of the stomach. I told him my opinion was that he had duodenal ulcer, but I would not be positive, and advised an exploratory incision. He had been losing weight for five or six months. I made an exploratory incision and found a large ulcer in the duodenum, did a gastroenterostomy, and the patient got well.

DR. A. B. GRAHAM (Indianapolis): We have a certain percentage of these cases in which a careful, painstaking history and careful physical examination will make a diagnosis for us. We have a certain percentage where it becomes necessary to resort to all the accessory methods of examination. Gastric analysis we use more to determine the motor activity of the stomach and the amount of stasis than we do for its secretory determination—and finally the x-ray study assists us in arriving at a proper diagnosis. Then we have a certain percentage of cases where with all these methods combined it is absolutely impossible to make a diagnosis.

The only point on which I disagree with Doctor Foxworthy is in regard to x-ray study. I leave that to the last. I rely mostly upon careful history taking and physical examination, then the chemical study, and then if I cannot reach a diagnosis, or if I wish to confirm one already made, I resort to x-ray study.

DR. H. H. WHEELER (Indianapolis): In diseases of the gastrointestinal tract I always take the history as a sheet anchor in arriving at a diagnosis. I think there is more to be learned from a good family and personal history than from any other one thing available. The date of onset of symptoms and their special features with reference to pain, nausea and vomiting, fever and periodicity, together with any disturbance at the time of taking food, are all essential.

Next to the carefully taken history comes the physical examination. A physical examination limited to the abdomen and pelvic organs is not sufficient. It should include a complete examination of the entire body, the chest, urinary organs, the nervous system, and not infrequently a blood and spinal fluid test.

When it comes to finding blood in the stomach extractions and feces, one should be fairly sure of the origin. A positive finding does not always mean ulcer. The blood may come from the teeth, from the throat or pharynx, or from trauma as the tube passed into the stomach. Blood found in the feces must be from a meat-free stool, and the possibility of blood from the pile-bearing area or some point higher up must be excluded before

occult blood in the feces takes on any diagnostic import of duodenal ulcer.

Fractional gastric analysis is preferable to other methods of testing gastric extractions, but like the radiograph, its value depends on the interpretation of the findings.

DR. ALBERT M. COLE (Indianapolis): There has been a good deal said here regarding the x-ray in the diagnosis of duodenal ulcer. Much of this has been erroneous and unjust, and I shall hope to say something which may clarify your minds.

The x-ray is a new agent which as yet has not fully come into its own. I remember my first visit to the Mayo Clinic ten years ago. They were then placing the x-ray fourth in value in diagnosing duodenal ulcer. On my last visit two years ago I found they were placing it first, and Doctor Carman was finding approximately 95 per cent of duodenal ulcers by means of the x-ray. Of course the vast majority of x-ray men cannot obtain such results, but it can be approximated. Experience and thorough fluoroscopic and plate study are the keystones to success.

History is of great value and may by some be placed first of all diagnostic means, but how many cases do we find with a typical history and yet no ulcer found? Acid findings are of the greatest value, but this also often fails us. Only a few years ago Monahan said that hyperchlorhydria always meant duodenal ulcer; but we know better than that now.

We are using the x-ray in gastrointestinal diseases much better than formerly. We are learning a new subject and we have made our mistakes, but we have improved our technique and gained from experience, until today I contend that the x-ray diagnosis of duodenal ulcer stands first. With proper interpretation of fluoroscopic and plate findings we should all do better than 90 per cent.

I wish to commend the essayist on his idea of cooperation. We must have this to obtain our best results. We do not like to take on gastro-intestinal examinations unless the patient has been sent to us by a physician and unless some study has been made of the case. Too often they have been sent to the roentgenologist as a "short-cut" to diagnosis. The family physician is often too lazy to take off his coat and find out all he can before sending his patient to the x-ray laboratory to make a diagnosis for him.

In addition to the value of the x-ray in diagnosing duodenal ulcer, it is of almost as great value in determining the presence or absence of pyloric obstruction from benign duodenal ulcer scar. This may be found by other methods, but not so certainly. We not only wish to know if obstruction exists, but also the degree of obstruction.

This must always be decided before advising surgery, or medical and dietetic treatment.

DR. THOMAS B. NOBLE (Indianapolis): I am very sorry we are not at liberty to discuss this subject farther and take up the matter of treatment. My own experience, frankly put, is this—that after the history has been taken, and all that goes with it; after the contents of the stomach have been carefully analyzed and tabulated; after a physical examination of the patient has been made, I am frank to say I think we should do an exploratory laparotomy. Occasionally we will run across a case in which we are very sure of peptic ulcer; but many times these very sure cases turn out to be something entirely different.

Doctor Cole and I have studied a great many cases with the x-ray, and while no one denies the helpfulness of x-ray study, we are uncertain not only with x-ray study but with every study we have at our command. Therefore, the wider our experience the more we are impressed with the fact that in suspected peptic ulcer cases exploratory laparotomy takes away a great deal of the uncertainty.

DR. C. F. VOYLES (Indianapolis): I was impressed with the fact that the discussants omitted the negative value that attaches to a stomach analysis in case the acidity is normal or below. This is often the case and certainly is an argument against ulcer. We should therefore be thankful for all the evidence we can get. This is also true of the occult blood test of the feces. It is often negative if the patient has been on a meat-free diet for a few days.

In regard to the x-ray, I do not think we should allude to these negative reports as mistakes. If we are diagnosing a case of pulmonary tuberculosis we do not say a negative report on the sputum is a mistake. Perhaps the negative report is a correct report of all that was in evidence. Is it not worth while to know that no ulcer was in evidence? Radiology is simply a scientific method of registering densities, and the conditions may be such that the density of a barium-filled ulcer crater cannot be shown.

Fortunately, after all our diagnostic resources have been exhausted we can usually say with reasonable confidence that the case is or is not surgical and advise accordingly. Under such circumstances we should not hesitate to advise exploratory laparotomy.

CYCLOPLEGICS IN REFRACTION WORK*

ALBERT E. BULSON, JR.

FORT WAYNE

Every ophthalmologist recognizes the fact that no branch of his work requires more time, patience, and skill than does the determination and

*Read before the Section on Ophthalmology and Oto-Laryngology of the Indiana State Medical Association at the Muncie Session, September, 1922.

proper correction of errors of refraction, and probably there is no part of his work that brings to him such relatively poor pecuniary returns. However, it should not be forgotten that some of the most grateful patients, and ones who bring prestige to the ophthalmologist, are those who have vainly endeavored to obtain a comfortable and satisfactory correction of a complicated error of refraction only to secure the desired result after receiving painstaking and thorough attention at the hands of some ophthalmologist who not only appreciates the advantages to himself as well as to the patient of doing good refraction work, but possesses the qualifications and patience for doing it.

Faulty refraction work may be due to carelessness and a dislike of the work owing to the petty annoyances accompanying it, and the patience required, though more often it is due to absolute incompetency on the part of the examiner. The better class of opticians do as good and oftentimes better work than many of the ill-trained eye specialists, and it is a reflection upon our profession to ignore the necessity of painstaking and accurate refraction work if we are to do the work that is expected of us by our patients, and if the desired results are to be secured.

The opticians decry the use of "drops," but this is because they are not permitted to use them. Many of them reluctantly admit that there are some cases which require "drops" in order to determine the refraction accurately and prescribe glasses intelligently. Unfortunately there are a few doctors with an optician's narrowness of view who also consider "drops" unnecessary and are quite satisfied to prescribe the manifest correction and trust to luck for the rest. It should be put down as an incontrovertible fact that in all patients under forty years of age, and even in most of them past that age, the examiner is never sure of the static refraction until after the accommodation has been paralyzed, and the only satisfactory way to paralyze the accommodation is by the use of cycloplegics. In patients of any age, except where increase of intraocular tension is manifest, a cycloplegic is necessary, not alone to facilitate retinoscopy, but to aid in careful ophthalmoscopic examination.

The selection of the cycloplegic depends in a measure upon the patient's age, physical condition, occupation and temperament. No one will dispute that the best cycloplegic is atropine, one drop of one per cent. solution being put in the eyes three times per day for four or five days prior to the examination. However, the effect of atropine is so prolonged and puts the patient to so much inconvenience that oftentimes a weaker cycloplegic is indicated, and we all will admit that except in a few instances a weaker cycloplegic works quite as satisfactorily as atropine. In my experience

hyoscin in half per cent. solution is almost as satisfactory as atropine, and it possesses the advantage of producing a rapid cycloplegia inasmuch as total paralysis of accommodation usually is present from one and one-half to two hours after the instillation of one drop of the solution, and its effect is sufficiently evanescent so that at the end of about four days the accommodation has returned, whereas patients under atropine are usually without accommodation for at least a week and more often ten days after the instillation of the last drop.

Homatropine in two per cent. solution is the most evanescent of any of the cycloplegics, the effect usually disappearing in from forty-eight to seventy-two hours, and though less certain in some instances, yet it is very satisfactory in a very large proportion of the cases. The reason it is not so satisfactory in the hands of some ophthalmologists is because it is not used properly. The homatropine should be from a manufacturer of established reputation for quality, the solution fresh, two cent in strength, and the drops put in the eyes at ten minute intervals for not less than six applications. The nurse or office attendant who puts the drops in the eyes should be told exactly how to do it, and this should include instructions to the effect that the patient's head, facing the light, should be thrown well back, and the drop permitted to enter at the outer canthus while the patient is looking downward, thus permitting the solution to come well in contact with the ocular conjunctiva. Thirty minutes to an hour after the last application complete cycloplegia will exist in the average patient. Some ophthalmologists recommend the addition of cocaine to the homatropine solutions, but in my experience it has been found that the cocaine produces a noticeable wrinkling and nebulous clouding of the epithelium of the cornea, which is more marked in some patients than others but very disastrous when it comes to estimating the static refraction by retinoscopy as the clouding of the cornea interferes with satisfactory results from the test. This clouding of the cornea, due to desiccation, may be prevented to some extent by having the patient keep the eyes closed throughout the time that the drops are being used, but even with such precautions it is not always preventable, so for some years I have ceased to combine cocaine in the homatropine solution.

It is important that the accommodation be tested at all ages. When tested before the use of cycloplegics it gives information concerning the subnormal accommodation which in some patients gives discomfort until recognized and given appropriate attention. In patients who have had "drops" it gives knowledge as to the amount of cycloplegia. Likewise the manifest error of refraction should be determined before a cycloplegia is employed.

Having secured what is thought to be cycloplegia, the patient is taken in the dark room and subjected to a retinoscopy. Here again painstaking and accurate work is necessary, due regard being given to the distance of the examiner from the patient, which should not be governed by guesswork but actually by the use of a meter measuring rod. Furthermore, the observer, who should wear his own correction, should be quick to detect the variations in the shadow and note with precision the point of reversal. It is my experience that not everyone, no matter how much training, can do a good retinoscopy. It is trying upon the eyes and upon the temperament of the examiner because of the accuracy and the patience required. However, there is nothing more satisfying and so essential to good refraction work as an accurate retinoscopy. A good retinoscopist will obtain findings that will be confirmed by the trial case in every instance providing there is complete cycloplegia, and while it may be possible in a complicated case, by tedious and painstaking effort, to determine the static refraction under cycloplegia with test lenses alone, yet in the majority of instances when this is attempted the results will be imperfect, while both the operator and the patient may be exhausted by the effort. In squinting children under school age, who cannot be tested with charts, a retinoscopy under cycloplegia is absolutely indispensable, but having determined the static refraction in these children by retinoscopy it becomes as easy to give appropriate glasses as it would be to prescribe glasses for an adult.

The patient should, and it is my experience that he does, take the retinoscopic findings without the slightest variation providing the cycloplegia is complete. If he does not take the retinoscopic findings I feel satisfied that the cycloplegia is not complete and a certain amount of accommodation can be demonstrated by the near point test. Patients who have abused eyes by long use under trying conditions and without wearing a correction of complicated errors of refraction, and patients who are high strung and nervous, are most apt to present so-called "spasm of accommodation." These patients often require not only a stronger cycloplegic than homatropine, but the enforced rest of the ciliary muscle occasioned by the cycloplegia, before the static refraction can be determined with accuracy. It is not denied that many of these patients are relieved greatly by correcting a certain portion or all of the error of refraction that has been determined even imperfectly, but unless we are certain of the results we stand charged with having done inaccurate and faulty work.

Many times I have felt that the static refraction had been determined with a fair degree of accuracy under homatropine cycloplegia, only to

find out a few days later, with the patient under atropine cycloplegia, that the results were entirely different. I realize that we are putting many patients to great inconvenience by asking them to use atropine as a cycloplegic, and I confess to a frequent yielding to the comforts and convenience of the patient, but the fact still remains that many of our patients must undergo the complete cycloplegia brought about by atropine alone if we are to do satisfactory work for them. The variation in the results is most apt to be seen in the amount of astigmatism uncovered, and in reality it is the astigmatism which contributes most to cramp of the ciliary muscle. It is in cases of compound or mixed astigmatism as well as in a certain number of cases of simple hypermetropia and myopia, accompanied by so-called "spasm of accommodation," in which the value of cycloplegia is necessary, and in which the necessity of an accurate retinoscopy is demonstrated. Furthermore, the rest occasioned by the use of the cycloplegic, and the time required for its subsidence after the examination, is not only a valuable therapeutic measure but it enables the patient to become accustomed to the glasses more quickly and with less discomfort. Seldom does a patient complain of this enforced rest after it is explained to him why it is necessary and how much more accurate and satisfactory will be the results. Another result secured by complete cycloplegia is the elimination in many instances of muscular insufficiencies. In fact so frequently is this the case that in cases that have had the accommodation at rest through atropine cycloplegia I but rarely prescribe prisms and find less use for prism exercises.

To obviate the necessity of putting the patient to inconvenience by having the accommodation in both eyes suspended at once it may be advisable to follow a plan proposed by S. E. V. L. Brown of Chicago, of refracting one eye at a time.

It should be an inflexible rule that no cycloplegic should be used in an adult without first ascertaining the vision, the manifest error of refraction, the accommodation at the near point, and the state of the tension. If there is any suspicion of increased tension, or if the vision does not come up to normal with correcting lenses, it is essential that an ophthalmoscopic examination be made before the drops are used. If there is the slightest question as to tension it is even advisable to use the tonometer for the purpose of determining the tension before the cycloplegic is used. This is especially necessary as a precaution when contemplating the use of a cycloplegic in patients beyond forty years of age. In my personal practice we use the full six drops of homatropine in patients under fifty years of age, and one to four drops, depending upon the state of the accommodation, in all patients beyond fifty years of age. In fact it has been learned that many patients beyond

fifty years of age have a surprising amount of accommodation, even cramp of the ciliary muscle, which makes it difficult or impossible to determine the static refraction unless a cycloplegic is used. Ordinarily it does not require as much of the cycloplegic as in younger persons, but without the effect of the cycloplegic the result may be inaccurate and the desired comfort of the patient not secured.

It is admitted that in those persons who need the close vision promptly, and no conflicting results have been obtained under homatropine cycloplegia, the return of the accommodation may be hastened by the use of eserin before the patient leaves the office. In all patients past forty years of age in whom homatropine is the choice of cycloplegic, the use of a myotic before the patient leaves the office should be an invariable rule, and the only exception to this is when the tension is known to be low and the patient can be kept under observation.

Idiosyncrasy is relatively rare though it will be discovered occasionally, no matter what cycloplegic is used. It is my experience that in the few cases in which idiosyncrasy occurs the toxic effects are greatest from hyoscin, less with atropine, and still less with homatropine. These toxic effects may be prevented largely by exerting pressure over the canaliculi immediately after the drops have been instilled in the eyes, thus preventing the solutions from going into the nose where they are absorbed with corresponding increased systemic effects. Children are more susceptible to toxic effects than adults, and oftentimes the disturbed mentality interferes with a satisfactory examination. While the toxic effects are not in any sense serious, yet the patient must be kept under observation even though antidotes are employed. In the case of children who are mildly delirious and having hallucinations, the parents should be told that the effects will wear off in the course of twenty-four hours but during that time the patient must be under observation to see that no harm comes to him.

The question of what glasses to prescribe after the static refraction has been determined is one that must take into consideration the patient's health, occupation, conditions under which laboring, the temperament, the kind and amount of error of refraction and the state of the accommodation. A robust, healthy individual is very apt to have a stronger accommodation than one who has poor health or is debilitated from any cause, and is less subject to discomfort through a lack of the refinements of refraction. The same is true of a phlegmatic individual as well as one whose eyes are not put to exacting work such as long continued hours at bookkeeping, draughting, or anything else requiring close and accurate vision. Furthermore, the child with flexible accommoda-

tion is less subject to the discomfort and disturbances of vision occasioned by small errors of refraction than the adult, consequently headaches and even blurred vision, except when the eyes are used extensively, are not prominent manifestations, but the very fact that they do not have much if any manifest error is a definite reason why they should be subjected to cycloplegia. In children and young adults I have found homatropine as a cycloplegic not very reliable and, accordingly, it has been my practice for many years to use hyoscin in these cases almost invariably, though atropine is employed in a considerable number of cases, especially in those exhibiting any form of squint. The examiner who relies upon homatropine in all cases often will be surprised to note the difference in results obtained later when checking the refraction under atropine, and he also will be surprised agreeably to note that prescribing glasses from results secured under atropine cycloplegia brings comfort to the patient that was not secured before.

Whether the full correction should be given or not is a question that must be decided by many factors, but in not a single instance, barring well established presbyopia, where a mydriatic like euphthalmin may be employed, can we dispense with cycloplegia and be sure of our results, for it is my experience that discomfort is occasioned by undiscovered and uncorrected errors of refraction, especially astigmatism, which only cycloplegia will determine with certainty. My plea therefore is for the persistent and intelligent use of cycloplegics in refraction work, coupled with an accurate retinoscopy in every case, and then the display of reasonable intelligence in the prescription for the glasses.

DISCUSSION

DR. A. L. MARSHALL (Indianapolis): I would like to ask Doctor Bulson if he has ever encountered a case of increased tension as the result of the drops used. It has been established now, and is my custom, to use drops after the age of forty. I have had no difficulty, although I have used drops in practically all cases. In my dispensary work (which has been considerable) as well as in private practice, I have never yet seen increased tension due to any mydriatic that has been used.

DR. GEORGE F. KEIPER (Lafayette): To estimate a patient's refraction is not always an easy matter. At times it is very hard to get a complete cycloplegia, and often I fear we proceed with incomplete cycloplegia. In using any cycloplegic it is best to put the patient in a shaded room and caution him to keep his eyes closed while awaiting its action, i. e., until the accommodation is eliminated. Personally, I like to use the gelatin discs containing 1/50 grain each of homatropin and cocaine. After a half hour, then a 2 per cent. solution of homatropine in water is dropped into the eye until three instillations are

made at ten minute intervals. The accommodation is then tested and if still present more cycloplegic is necessary, or a stronger one is indicated. I have used all the cycloplegics, but limit myself to atropin and homatropin.

In children it is a safe rule to use atropin exclusively; after puberty homatropin may be used. If it fails to suspend the accommodation, then use atropin. Some patients are annoyed because of the length of time required to restore accommodation after the use of atropin. It is a good plan to have on hand several pairs of plus 3 diopter lenses in good frames which you can loan such patients. These will enable them to read fine print.

How much of the error of refraction shall be corrected? If there is no manifest error it is a pretty safe rule to correct all the astigmatism. To this add one-half of the total hymetropic error. If a manifest error is apparent, subtract the manifest error from the total error; divide this by four and add the quotient to the manifest error of hyperopia; to this add the astigmatism present. Prescribe this for constant wear. After a time the axis of astigmatism may shift and re-examination will be necessary. The patient must be warned of this possibility and told to return if the symptoms for which he sought relief reappear. Where there is a high degree of hyperopic astigmatism the patient may refuse full correction. It is then wise to give a partial correction and gradually approach the full correction.

DR. W. A. HOLLIS (Hartford City): There are two points in this splendid paper that stand out prominently and that should be emphasized. First, the use of homatropine. We put much dependence upon the cycloplegia which we expect to obtain within an hour. In our experience we usually get that relaxation within that time. But I have found that in refracting a patient in the afternoon, when the eyes are tired, I cannot get response to the subjective test. But if I let the patient rest—give her a pair of colored glasses and have her come in the next morning, using homatropin again, I have satisfactory relaxation.

The other point is very academic, but it will appeal to all of us. That is, at times when we are tired of the routine of business we dislike to do refraction—if we could get out of refraction we would do it, but we must refract or get out of eye work. I have worked out a solution, and refraction has become a pleasure instead of a drudgery. An intelligent high school graduate, with mathematical and scientific tendencies, can learn the principles of refraction. She can be taught to do retinoscopy better than I can. I have such an assistant now in my daughter, who is in love with the work and takes pride in it. I do not do retinoscopy now, but simply make the subjective test and check up her findings. Some-

times I think we are not in a fit physical or mental condition to do the best work in refraction, especially if the patient does not want medicine dropped in her eyes.

DR. O. G. BRUBAKER (North Manchester): I should like to emphasize what Doctor Bulson has said in reference to using atropin in one eye at a time for refractive work. In working in Doctor E. V. L. Brown's clinic a couple of years ago we had a series of 25 cases in which we put atropin in one eye at a time, then used homatropin in the other eye. In doing refraction under atropin we used one eye at a time and gave the correction before we started the atropin in the other eye, and secured splendid results. Homatropin refraction was never as satisfactory as with atropin.

Since I am in private practice in a small town I have a student body to deal with largely, and I find a good deal of objection to the use of atropin, even in one eye at a time. Sometimes we do what might be called a manifest retinoscopy. We put the patient in a dark room, seated about eighteen inches to the doctor's right and one meter distant, and have him look about eight inches past the right ear, far in the distance. In this way you get relaxation, and with the retinoscope it is surprising how nearly correct your findings will be.

DR. DON L. MILLER (Indianapolis): I want to emphasize Dr. Bulson's remarks in regard to the use of cycloplegics in ages from forty to under fifty. We are taught by some ophthalmologists not to use cycloplegics after the age of forty. I believe you will find that cycloplegics should be used in at least fifty per cent. of cases between the ages of forty and fifty. That has been my experience.

DR. ALBERT E. BULSON, JR. (closing): The subject of my paper was "Cycloplegics in Refraction Work," and I tried to stick to the text, as that seemed quite sufficient for discussion. The whole subject of refraction is so large and important and there are so many phases connected with it that one could discuss it for hours and then not cover the entire subject.

Some doctors who are posing as eye specialists are not using cycloplegics, and I contend that they are doing themselves and the patient a great injustice, for we know that the results are inaccurate and in many cases disappointing to the patient. This is true particularly in children and young adults where without suspension of the accommodation results are very apt to be conflicting, variable and inaccurate. Every case must be considered by itself, and never are we justified in overlooking the condition of the general health, for many patients that may be considered as purely refraction cases require some elimination and regulation of the habits of life in order to

make even a pair of glasses give the desired relief.

Increased intraocular tension from the use of drops has been referred to by one of the speakers and I only want to answer that by saying that no physician should use either a mydriatic or a cycloplegic until he is satisfied that the tension of the eye is essentially normal. Furthermore, except when a cycloplegic is used for a therapeutic effect, I think that a myotic should be employed immediately following the examination under a cycloplegic. If there is a suspicion of increased intraocular tension, the tonometer should be used prior to the use of any cycloplegic. All refraction cases past forty years of age should have a myotic such as eserine used in their eyes before they leave the office.

Concerning muscle imbalance, do not get the impression that I do not prescribe prisms or prism exercises. The point I wish to emphasize is that a muscle imbalance may be due to lack of muscle tone, some disturbance of the general health, or even from the effect of an uncorrected error of refraction. At the first examination we note the character of the imbalance. If prisms are prescribed following the first examination it is with a view to correcting hyperphorias which have less tendency to correct themselves. However, one who follows these cases of muscle imbalance will be surprised to know how frequently they correct themselves under the influence of proper glasses, supplemented perhaps by attention to elimination, dietary regulations, or treatment of some constitutional trouble. Not infrequently prism exercises are prescribed with the utmost benefit to the patient. The prescribing of this latter form of treatment depends upon the amount of the muscle imbalance as well as its relationship to both far and near vision.

As to the use of ophthalmic discs in applying the cycloplegic, I followed that practice many years ago but finally abandoned it for freshly prepared drops which I have thought were more agreeable to the patient and more effective. Recently I have tried the discs again, but really do not think that they possess any advantage over the drops, and they do leave a sticky secretion in the eye which must be removed thoroughly before any further examination is made.

No hard and fast rule can be made to decide the question of the amount of correction to be given. Personally I pay a great deal of attention to a carefully worked out manifest correction, and the manifest correction so determined is very largely a guide in my decision as to how much of the static refraction to correct. I seldom if ever cut the cylinder, but I invariably cut the spherical where it is plus or minus, and in case it is plus the reduction will depend upon the difference between the manifest correction and the

static correction, coupled with a consideration of the health, temperament and occupation of the patient. Some patients will wear at once a nearly complete correction of the static error whereas in another patient such a policy would prove disastrous, perhaps due to the temperament of the patient. As an instance of error in judgment permit me to cite the following case: A very high strung and nervous young woman, suffering from a long train of symptoms dependent upon eye strain, had only a manifest error of one diopter of hypermetropia even with the fogging system. Under a cycloplegic, the retinoscope showed an error of six diopters of hypermetropia, and the correction was taken while under a cycloplegic with resulting normal vision. The patient for a period of six months had been trying to wear a plus five diopter lens, and even with the help of the cycloplegic was unable to get results, and gave up in disgust. My findings corroborated those of a confrere, but instead of attempting to put on nearly full correction at once, which I think could have been accomplished by the prolonged use of a cycloplegic and the wearing of the correction during the time that the accommodation was suspended, I gave the patient successively and at varying intervals two, three, four, and five diopter lenses, with eventually nearly the full correction for permanent glasses and with the utmost comfort for the patient. This perhaps might be considered an extreme case, yet, on the other hand, I have known patients who were wearing nearly a full correction and perfectly miserable to receive the utmost satisfaction and comfort from the full correction as determined under a cycloplegic and retinoscopy.

I like the suggestion made that patients who come back the second morning for an additional drop of homatropine and a retinoscopy may give confirmatory or contradictory results that add greatly to a knowledge of the condition that is presented. However, I, like most of you, have patients that come from long distances, and I feel that thorough and painstaking work is required in order to do justice to the patient as well as myself and, whenever possible, I try to save the patient an unnecessary trip or a stay over, until the following day by making my first examination sufficiently exhaustive to warrant me in believing that there has been little chance for error in the results.

A careful and painstaking retinoscopy with the accommodation entirely suspended, done by a trained retinoscopist, is absolutely essential in order to determine the static refraction, and in this connection I wish to emphasize the fact that retinoscopic findings may vary if the accommodation is not entirely suspended. Therefore, it is necessary to have something more than a dilated pupil in order to be reasonably positive that the

retinoscopic findings can be relied upon. Any bright, conscientious girl, not of a particularly nervous temperament, can be trained to do good retinoscopic work. In fact, they oftentimes become unusually proficient and their findings dependable. I have three such young women in my office aside from my regular medical assistants who also can do retinoscopies. However, in the final analysis, painstaking, accurate work has to be coupled with a recognition of the personal characteristics, and the age, health, temperament and occupation of the patient must be given consideration if comfort and satisfaction is to be given the patient.

PARATYPHOID IN A BABY

REPORT OF A CASE

LOUIS J. WISCH
WHITING

This case is reported because of the rarity of paratyphoid in infants under one year of age, and to stimulate practitioners to be on the lookout for similar cases in districts in which typhoid is not an uncommon disease.

Baby B., female, age 5 months, entered hospital with a history of diarrhea, vomiting, persistent fever, pain in the abdomen, and fretful, sleepless nights. Symptoms began about six weeks previously, accompanied by eight to ten bloody, mucous stools with considerable tenesmus. Vomiting present from onset, and bearing no relationship to the quantity or kind of food. The fever present for six weeks was persistent, but remitting from 101 to 103, occasionally going to 104. Pain in the abdomen manifested by drawing up of knees, and tenderness on palpation was present from the onset and accompanied by more or less distension. Sleepless, fretful nights caused by pain and convulsive-like movements of the head were present from the second week of illness. Pediatric history points to a normal development for an infant that age. Feeding history—breast milk up to three months, artificial formula of Eagle Brand and Nestle's food up to illness, and since then the formula has been changed many times, as a number of physicians were seen, the latest formula consisting of a rational formula of skimmed milk and dextri-maltose No. 1. The family history is negative as to diarrheal diseases of any kind, while the infant had never been ill previously.

Physical examination showed an anemic, fretful, prostrated infant, acutely ill. The head was negative except for a slightly depressed anterior fontanelle, the membranae tympani were negative, while the neck showed no adenopathy and was negative. The heart and lungs were normal, while the abdomen was slightly distended. No visible peristalsis, masses, or rigidity, but tenderness as noted. A few rose-spots disappearing on

pressure were diffusely situated over the lower abdomen, and the buttocks were badly excoriated. The genitalia were clean and normal, the anus showed no ulcers, fissures or growths, while proctoscopy revealed a hyperemic swollen mucosa but no signs of bleeding nor any pathology to account for the findings. The extremities were normal while the reflexes were present and no abnormalities.

The laboratory findings showed: the urine negative for albumen, casts or pus; the blood showed 10,500, lymphocytes 82%, polymorphs 18%; stool culture yielded *B. Paratyphosus* "B"; agglutination was positive for *B. Paratyphosus* "B" (1 to 80 dilution); the paradoxical reaction (12 hour starvation) was negative.

Upon recommendation of Dr. Barrows, emetine hydrochloride, grains 1/20 hypodermically, was administered, but convalescence set in and the remedial benefits were uncertain.

CROCHET NEEDLE IN ABDOMINAL CAVITY

CASE REPORT

R. O. McALEXANDER, M. D.
INDIANAPOLIS

W. McP.—Female, age 29, mother of two children, 8 and 3 years respectively. On June 3rd, 1922, having missed her regular menstruation and fearing conception, resolved to terminate the same. She accordingly introduced into her uterus, blunt end first, a celluloid crochet needle five inches long. She was unable to recover it at this time. She made the morning trip to her grocery, expecting it to be discharged. She made such attempts as she could to locate the needle by manual examination of the vagina and failed. She suffered no distress, was able to attend to her household duties, but not finding the needle she became alarmed and called her family physician, who made the usual examinations without finding the same. He kept her under observation but no symptoms developed. However, the patient continued to worry about the incident and asked her physician for counsel. I was called June 7th. The patient was a small woman, weighing about 118 pounds. Abdomen relaxed, temperature and pulse normal. No evidence of pain or distress from the facial expression.

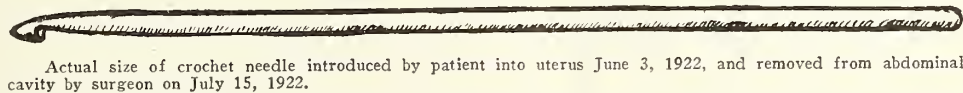
Physical examination of the abdomen and pelvis was made. The abdomen was relaxed. No evidence of tenderness or rigidity was elicited on deep pressure. The pelvis also was found to be normal on bimanual examination. The uterus was movable and could be flexed and extended. No evidence of a foreign body could be found by either of these examinations.

I gave it as my opinion that either on her trip to the grocery, or perhaps into the toilet, the needle had been lost. I advised her physician to

keep her under observation for any untoward symptoms that might arise.

On July 13th her physician telephoned me that this patient was still worrying about the crochet needle. He informed me she was in her usual good health, going about her household duties in

On July 15th I made a short median incision. Introducing the hand into the abdomen I examined the pelvis and the right side of the cavity, finding no evidence of a foreign body. The appendix was delivered and removed by the usual method. Examining the left side of the cavity



Actual size of crochet needle introduced by patient into uterus June 3, 1922, and removed from abdominal cavity by surgeon on July 15, 1922.

the usual way. Her only symptom was that on rare occasions she experienced a slight sticking pain in the abdomen. It never occurred twice in the same region. Her mental state seemed to be the chief concern.

I advised her physician to send her to the Deaconess Hospital for x-ray examination, which was made with a negative report. However, it was the opinion of the roentgenologist that if the needle was celluloid it would not cast a shadow, and therefore the examination was valueless.

Having arrived at this conclusion I advised that an exploratory incision be made, although I still adhered to my first conclusion that the needle had been discharged from the vagina.

high up I found the crochet needle, which the patient had described and used. It was caught in the omentum by the hooked end, the blunt end being free. No evidence of traumatism could be observed about the uterus or pelvis cavity. The patient made an uneventful recovery.

Conclusions: That we should never fail to take careful histories and should give due consideration to the patient's statements.

Second. That a foreign body may be introduced into the abdominal cavity through the uterus by the patient, without producing infection, although I believe this extremely rare.

Third. That the peritoneal cavity may tolerate a foreign body for a considerable period of time without producing grave symptoms.

OBSERVATIONS ON THE PRECIPITIN REACTION FOR SYPHILIS

Parallel tests of Wassermann and precipitin reactions made by Willson B. Moody, Omaha (*Journal A. M. A.*, Feb. 10, 1923), on 1,500 serums yielded complete agreement in 1,483 serums. The Wassermann reaction was positive and the precipitin negative in fourteen instances, and the Wassermann was negative and the precipitin positive in three. In three instances in which the Wassermann was positive and the precipitin negative, the tests were repeated and the reactions were found to agree (positive). In one case, the Wassermann was negative and the precipitin positive, and at necropsy syphilitic aortitis with aneurysm was found. In one instance with repeated tests, the Wassermann was always positive, and at no time could any trace of precipitation be made out. It is assumed that failure to agree the first time in the three serums was due to error in technic or in interpretation. It may also be noted that among the discrepancies the majority occurred early in the study and so may in large part be due to inexperience. Numerous tests were made on cerebrospinal fluids, without success, the precipitin test being very unreliable. Positive reactions occurred clearly only when considerable traumatic blood was present. In all Wassermann tests, the antisheep system was used, with amounts approximating 0.1 c.c., and with three antigens (10 units).

SKIN PREPARATION IN HYPODERMIC NEEDLE PUNCTURES

C. E. Tennant, Denver (*Journal A. M. A.*, April 14, 1923), describes the use of alcohol for disinfection of the skin in preparation for the use of the hypodermic needle. First, alcohol for commercial use, and even for hospital administration, is not what it was before the Volstead Act went into effect. Second, alcohol rubbed over the skin causes no discoloration; hence there is no target or landmark apparent to which the point of the needle may be directed in order to come well within the so-called sterilized bacteria-fixed area. Under such conditions, no doubt, it frequently happens that the hypodermic needle is plunged into an altogether unprepared spot. Consequently, although the technic of hypodermic syringe and solution sterilization may be ever so carefully executed, the unexpected happens, since the needle, passing through an unclean area, may carry with it whatever is lodged on the skin. The use of iodine as the agent best adapted to skin preparation has been universally accepted, and why alcohol is permitted, or recognized as equally effective when applied to hypodermoclysis, or the administration of drugs by hypodermic needle, Tennant says, is beyond comprehension, especially since the commercial forms of alcohol are generally used. Tennant reports a case of gas bacillus infection at the site of hypodermic puncture.

**THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION**

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

Office of Publication, 406 W. Berry St., Ft. Wayne, Ind.

JUNE 15, 1923

EDITORIALS

EDUCATING THE PUBLIC IN ILLINOIS

THE Indiana State Medical Association is not the only medical organization that is attempting an advertising campaign to educate the public concerning the aims and objects of the medical profession, for we note that the Illinois State Medical Society has proposed an assessment of ten dollars upon each member, and already is soliciting volunteer contributions from its members, to defray the expenses of a newspaper educational campaign in the press of Illinois. A pertinent discussion of this subject is contained in an editorial in the *Illinois Medical Journal*, which is as follows:

"Every member of the Illinois State Medical Society is being solicited for a contribution to the fund for carrying on a lay-educational campaign through the newspapers of the state.

"It is time the public is made familiar with what the science of medicine has done in the saving of human life; also made familiar with the dangers of quackery and charlatanism.

"Through glaring spectacular statements, and bought and paid for space in newspapers and periodicals, the charlatans have distorted medical facts and are menacing the health welfare of the people by playing on the credulity of the unsophisticated.

"So brisk is trade in the cults, that even blacksmiths, carpenters, plumbers and dress-makers are being recruited to take easy courses of from three to six months' duration and hang out shingles as healers.

"At the last meeting of the Illinois State Medical Society, it was voted to fight the 'quacks' with their own medicine. The Council of the Society at its September meeting appointed a committee to devise ways and means to educate the public to the dangers of medical practice by the untrained and uneducated. The committee was instructed to prepare and supervise data to be printed in the daily newspapers and periodicals that will open the eyes of the public as to the progress of medical science, what medicine has done and is doing for humanity, which is intended to specifically impress upon the people at large that a sick man needs a doctor and not

a mountebank. Articles for the lay press will be handled by a reliable organization, familiar with the best methods of securing results from publicity propaganda.

"Educational data will be placed before the public largely through the lay press, assisted by lectures, pamphlets, etc. The subject matter for the press, pamphlets, and the themes for the addresses to be made in public places, will be educative, elucidative and general. Exploitation of individuals or paternalistic theories will be disbarred. This campaign will be along lines showing the virtues of the real in contrast to the dangers of the bogus. It will open the eyes of the men who are too ignorant to distinguish medical skill from 'buncum,' and clear away the fogs from those who should know better, but who do not—turned in the wrong direction, perhaps, by some careless physician who is prone to despise the 'day of small things,' and laughed away the seeming trivial pain that a patient complained of because only appendectomy or a cancer of one of the great organs was of moment enough for consideration.

"The United States Government has found it expedient to advertise government securities in this day of get-rich schemes. Purveyors of natural resources, such as leather, wool, butter and eggs, are advertising daily the difference of their products over the synthetic wares flooding the markets.

"Medicine must retain its traditional dignity, but when the health welfare of the people is jeopardized, she must arise and expose the invaders.

"The proposed campaign cannot be prosecuted without funds; it must be supported by popular subscription. It is hoped that every doctor will subscribe to this worthy cause. Serious disease diverted from the incompetent will result in the saving of thousands of lives and will prevent much permanent invalidism.

"This campaign will achieve two great objectives: A gradual but ultimate restoration of the medical profession to its merited place in the public sympathy and confidence, and the inestimable benefits to humanity through the consequent prevention of disease and the preservation of life."

TEAM WORK IN MEDICAL PRACTICE

This is an age of specialism and nowhere is the expert more necessary than in the practice of medicine, even though it is safe to say that probably less than twenty per cent of all patients asking for medical advice require his services. This is taking into consideration the ability on the part of the average general physician to do the ordinary laboratory work, such as urinalysis, blood counts, examination of smears, etc. Among those

cases actually requiring the services of one or more experts in some particular field, whether it be surgeon, neurologist, ophthalmologist, otologist, roentgenologist or laboratory worker, there will be a certain number in which a seeming conflict of opinion exists, or perhaps an error in diagnosis is made possible through misinterpretations of findings. The consequence of this is a tendency to doubt the reliability of the findings of some of the consultants who are called into the case. Probably this more often occurs in connection with laboratory workers than with any others, and it is not only possible but entirely probable that such an unfortunate condition of affairs arises as a direct result of that lack of cooperation that should exist when attempting to arrive at proper conclusions.

Altogether too often there is a tendency on the part of physicians to be too self reliant, and to be too dogmatic concerning the relationship between cause and effect, or the interpretation of certain findings. For instance, the blood counts, the Wassermann, or the roentgenograms may tell a conflicting story, and unless the attending surgeon or physician takes into consideration the possibility of the existence of certain factors that at times have a tendency to produce contradictory results he may be led astray by the laboratory findings, while at the same time the physician responsible for the laboratory findings is placed in an unfavorable light when in reality his work is not only accurate but trustworthy and deserving of the greatest confidence.

There is not the slightest question of doubt that the laboratory worker should be permitted to interpret his findings, but he can not do this unless he acts in the position of a consultant and knows the history of the case, is able to analyze the findings as pertaining to the manifestations, and can determine for himself the limitations of his laboratory work or its contradictions. The fact that he may want to repeat his laboratory examinations and at the second examination reaches different conclusions, in no way minimizes the value or the trustworthiness of his first examination, for the very knowledge acquired as a result of his being placed in possession of the facts concerning the history and symptomatology of the trouble as well as the changing conditions in the patient himself, may have a very important bearing in determining with certainty the final conclusions.

We have in mind several experiences that are illustrative. For instance, a very refined woman, giving no history nor marked manifestations of lues, suffered from a lesion that was thought to be non-syphilitic because two or three blood Wassermans were negative. The laboratory worker was not taken into consultation and knew nothing about the case, and in fact he

was only asked to report his findings upon the various single specimens of blood that were presented. Finally a provocative dose of neosalvarsan was given intravenously, and subsequently a blood Wassermann showed a very strong positive luetic reaction and improvement in the condition of the patient followed anti-luetic treatment. It may be that the attending physician should have known that a blood Wassermann may not show up positive until after a provocative treatment, but the point of this comment is that had the laboratory worker known something about the case, or been in consultation concerning it, the chances are that much valuable time would have been saved and the positive Wassermann would have been forthcoming promptly following the obtaining of a negative Wassermann from the first sample.

Another illustration is the interpretation of x-ray plates, and we have in mind the plates made in supposed diseases of the accessory sinuses. Presumably the surgeon has the plates made because the symptoms are indefinite or because he desires to know something about the size and position of the sinus, possibility of partitions and other features that should be determined by an x-ray examination. If neither the surgeon nor the roentgenologist exhibits special care, or makes any endeavor to consult concerning the symptoms and manifestations, it is quite possible that the x-ray report may be that a sinus is positive, and the next day the surgeon tells the roentgenologist that he made a bad blunder for the sinus was opened and it was negative, or vice versa. Ordinarily we think that the x-ray should not lie, but as a matter of fact there is a very definite reason for apparently contradictory findings. In reality if the x-ray shows a relatively transparent sinus it is quite possible that drainage temporarily has emptied the sinus, and, in consequence, the roentgenologist would report a clear sinus, whereas if the plate was made before the sinus was drained considerable, even temporarily, the findings would be positive. On the other hand, it is not possible for the roentgenologist to tell the difference between granulations and pus. Consequently a sinus may be opened, the surgeon get no pus, and again the roentgenologist comes in for criticism whereas a radical operation discloses that the shadow was produced by granulation tissue rather than by pus. This only indicates the necessity for more cooperation by the surgeon and the x-ray specialist so that a differential diagnosis becomes easier. Oftentimes a second or third plate is necessary before an intelligent conclusion can be drawn.

No one should feel sufficient unto himself at all times and when the aid of others is sought it should be remembered that the best results are secured by treating those called into the case as consultants. In other words it is a question of team work.

AN OUTRAGEOUS TAX ON PHYSICIANS

The Act of Congress of December 17, 1914, known as "The Harrison Narcotic Law" as amended by the Revenue Act of 1918, approved February 24, 1919, provides in part as follows:

"Section 1. That on or before July first of each year, every person who imports, manufactures, produces, or gives away opium or coca leaves, or any compound, manufacture, salt, derivative or preparation thereof shall register with the collector of internal revenue of the district, his name or style, place of business and place or places where such business is to be carried on, and pay the special taxes hereinafter provided;.....physicians, dentists, veterinary surgeons, and other practitioners lawfully entitled to distribute, dispense, give away, or administer any of the aforesaid drugs to patients upon whom they, in the course of their professional practice are in attendance, shall pay \$3 per annum....."

Under this law for several years there has been levied on physicians and collected by the internal revenue department of the Federal Government, the special tax mentioned in the Act, amounting to \$3.00 yearly, taken from each practitioner "dispensing opium, etc."

This tax probably aggregates over \$200,000 annually. The registration of the physicians who submit to this exaction furnishes the government with a list of those who obey the law, and it is probable that the money wrung from them suffices to pay the salaries and wages of the horde of assistants to the collector, inspectors and clerks for whom places are thus found, and also furnishes sufficient additional funds to prosecute offenders.

The whole scheme is iniquitous and abominable, and physicians should submit to it no longer. This taxation does not benefit physicians. If it is for the benefit of the people, if it is to protect them from the dangers of drug addiction, let them all be taxed for it. We might as well tax garage keepers to secure funds for fire protection, or clergymen to secure funds for police protection. If the public at large is to receive benefit, let the public be taxed, and let the general budget cover the needed amount, each citizen paying his little share. Legislation against a law-abiding class for the general weal is inequitable and vicious.

If the idea is to secure a separate and perhaps more accurate registration of the law-abiding physicians, and if the end can be reached only by a fee, let the fee be made half a dollar annually, and let the salaries be paid out of the general budget, and not be made a graft upon the doctor's pocket. Of course, the Directory of Physicians, published by the American Medical Association, can be purchased for a few dollars. What more is needed? But, of course, to use that volume would not furnish the government positions for a host of place hunters and barnacles.

In the 67th Congress, House of Representatives

Bill 14328 was introduced by the Hon. John Joseph Kindred, M. D., of the 2nd District of New York. This bill provided for a reduction of the \$3 special annual tax upon physicians, but was introduced too late in the session for a hearing before the Ways and Means Committee of the House, in whose committee it died.

Dr. Kindred will arrange for a hearing immediately after reintroducing his bill at the next session of Congress. It is confidently hoped that a representative body of physicians will be present at the expected hearing, to convince the committee of the iniquitous character of the tax. Why should it not be abolished? Memorialize your congressman early next December and secure the repeal of that part of the Harrison Narcotic Law that applies to physicians."—*New York State Journal of Medicine*, May, 1923.

OBJECTIONAL EXHIBITORS AT MEDICAL CONVENTIONS

It is a well known fact that at the annual sessions of the A. M. A. no proprietary drugs and chemicals or similar preparations used in the treatment of diseases, which do not comply fully with the rules of the Council on Pharmacy and Chemistry and which have not been accepted by the Council for inclusion in New and Non-Official Remedies, can be exhibited, distributed or in any way advertised in the convention hall. Likewise no medical journal or publication can be exhibited that contains advertisements of drugs, chemicals, preparations or articles used in the treatment of disease which do not conform to the rules of the Council on Pharmacy and Chemistry of the American Medical Association.

Some eight or ten years ago rules of similar character were adopted as guiding the officers in arranging for annual sessions of the Indiana State Medical Association. However, in a few instances both the spirit and intent of these rules were broken by committees on arrangement, and in view of the approaching session to be held at Terre Haute we desire to call attention to the matter. Under no circumstances should our Association permit firms to exhibit at our annual sessions products which THE JOURNAL would decline to advertise. A few years ago a firm advertising and selling proprietary remedies of questionable merit secured space in the exhibition hall at one of the sessions of our State Association where the representatives distributed samples of notorious nostrums which had been exposed by the Council on Pharmacy and Chemistry of the A. M. A. as frauds and could not be advertised in THE JOURNAL. Afterward the exploiters of these fraudulent preparations boasted of the fact that the Association as a whole was not supporting THE JOURNAL in its effort to have so-called "clean advertising pages." Such a condition of affairs does not speak well for the ethics and propriety of

the Association, to say nothing of fairness to THE JOURNAL which makes every effort to exclude untrustworthy advertisements to protect its readers. THE JOURNAL could be filled with advertisements of the nostrum class and prosper financially in consequence, but since it is published primarily for the benefit of its readers and not for profit all advertisements known to be dishonest or even questionable are excluded. Since this policy of discrimination protects the members of the Association it should be considered an imperative duty on the part of the Association to cooperate with THE JOURNAL in sustaining such a policy. The members of the Association owe it to themselves to buy trustworthy goods from reliable houses, and if they can depend on the advertisements printed in THE JOURNAL why should they not expect that discrimination will be employed in granting permission for the exhibition of products at the annual sessions of the Association? We have been given to understand that the policy recommended will prevail at the coming session of our Association, and we want every member of the Association to know that this Journal is going to fight for a policy which we believe to be to the best interests of its members. Products which can not be advertised in THE JOURNAL should never be exhibited at an annual convention of the Association.

WHAT LOS ANGELES THINKS OF THE ABRAMS CULT

In the *Bulletin* of the Los Angeles County Medical Association, published April 5, 1923, there appeared this item:

The following resolution was adopted at the meeting of the Board of Councilors held March 12, 1923: "It shall be the sense of the Council that Abrams' method of diagnosis is a fraud. Any physician practicing this method is ineligible to membership. If a member, he shall immediately cease this method of practice or charges of unethical conduct shall be preferred against him."

If more medical societies would take this action, the activities of those now exploiting the Abrams nonsense—diagnosing syphilis in healthy persons and professing to cure cancer by means of the "Oscilloclast"—would be confined to those "drugless healers" and "advertising specialists" who already form so large a part of Abrams' disciples.

Journal A. M. A., April 28, 1923.

If would be entirely proper for some of the medical societies in Indiana to pass a resolution similar to the one quoted above. We regret to admit that there are a few supposedly reputable and intelligent physicians in this state who have taken up with the Abrams nonsense and, in fact, are willing to adopt most any sort of medical fads without making any attempt to learn through trustworthy sources that such fads have any virtue. We sometimes think it is the mercenary and commercial instinct which prompts some doctors to take up with untried theories and practices,

though probably in many instances it is pure ignorance. Anyway a little more disciplining of medical men would be a good thing.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

OUT-COUEING COUE

Oh, hell—

I'm well!

—*The Journal of the A. M. A.*
May 19, 1923.

"INSULIN" is now heralded through circulars of information sent out to lay and medical publications as a cure for tuberculosis as well as diabetes. Until its virtue has been established why go to such elaborate efforts and no inconsiderable expense to herald the thing far and wide in the newspapers? Why not permit reputable medical men to pass judgment before giving it to the public?

OF course Coue would write a book! Every foreigner who thinks he amounts to anything does write a book after visiting America, and the strangest part of the procedure is that Americans will buy the book. We doubt if Coue's impressions of his American visit are of particular interest to intelligent, thoughtful readers, but the sale of the book will fatten the purse of Coue, and that is the main consideration.

ONE of the Indiana judges has announced that in the future physicians who give certificates stating that well persons are too ill to appear in court as witnesses will be prosecuted. This is a step in the right direction, for altogether too frequently doctors are willing to gratify the desires of persons wishing to avoid court appearance by stating that such persons are too ill to appear when as a matter of fact such statements are untrue. A few prosecutions will have a very salutary effect.

OHIO is not the only State that has put a crimp in the chiropractic program, for Wisconsin's supreme court has decided that the practice of chiropractic is the practice of medicine and that

any person practicing any form or system of treating the afflicted without having a license or certificate of registration authorizing him so to do, shall not be exempted from but shall be liable to all of the penalties and liabilities for malpractice. Perhaps a few malpractice suits in any of the States where the chiropractors are attempting to treat the sick and afflicted would have a healthy effect in suppressing these pretenders.

THIS JOURNAL makes every effort to exclude unworthy advertisements in order to protect its readers. THE JOURNAL could be filled with advertisements of the Nostrum class and it would prosper financially; but, since it is published primarily for the benefit of its readers and not for profit, all advertisements known to be dishonest or even questionable are excluded.

Since this policy of discrimination protects you, it should be a privilege to patronize the advertisers in your own JOURNAL. Don't experiment! Buy trustworthy goods from reliable houses.

You may depend on the advertisements printed in this JOURNAL.

THE St. Louis doctors have formed a credit bureau. In commenting upon this, the *St. Louis Times* says that it is entirely proper for doctors to rate their patients as to financial ability or intention to pay, for "the doctor has been long suffering as to bills receivable and his turn to show good business sense assuredly has come." We really can see no good reason why doctors should not use the same discrimination in extending credit that is exercised by people following any other vocation, and they certainly have a right to know all about people who can not or will not meet medical bills. Every doctor extends charity where charity is due but he ought to protect himself from imposition.

THE chairman of the legislative committee of the Illinois Medical Society complains because there has been received by some of the legislators letters from medical men which, to say the least, were vitriolic in their expressions and certainly showed lack of diplomacy from a political standpoint. He ought to be thankful that he has even stirred up enough enthusiasm among medical men to prompt them to write the legislators, for here in Indiana we can't accomplish even that much, though he is perfectly right in objecting to any demands or evidence of coercion when attempting to secure votes for bills of interest to medical men. Nothing is ever gained by abuse, threats, or a display of temper. A very meritorious measure may be killed by over-enthusiasm and ill-mannered support on the part of its sponsors.

It probably is not generally known that the chiropractors, unable to obtain medical defense

contracts from any of the companies dealing with reputable medical men, have organized a Defense Association of their own with a capital of one hundred thousand dollars. The home office of the association is Fort Wayne, Indiana, and the officers are J. I. Evans, president; F. W. Brokaw, secretary; J. C. Hutzell, treasurer; E. C. Barber, manager of sales, and the general counsel consists of attorneys Albert E. Thomas, Louis F. Crosby and Benjamin J. Brown. The object of this association is to furnish counsel and defense contracts. We publish the names of the officers and attorneys connected with the association for the reason that we feel that our readers ought to know who among our business and professional men are aiding and defending these law-breaking chiropractors who are preying upon the sick and suffering and generally deluding the public.

THE chiropractors are treating contagious diseases and, of course, are not reporting them. The secretary of a city board of health has written us as to what he is to do about it. Except for the inhumanity of the procedure, it strikes us that it would be a good plan to let the public suffer the penalty of discomfort and even deaths from the mal-administrations of chiropractors, and an increase of contagious and communicable diseases as a result of not having them reported or quarantined. The only sure way to make people appreciate the fact that a stove is hot is to let them burn their fingers. The idea of permitting chiropractors to treat diphtheria, scarlet fever, small pox or any other of the contagious and communicable diseases is ridiculous, but it seems that our board of medical registration and examination is unable to secure convictions for practicing medicine without a license, so why worry? When it comes to handling contagious diseases, if the public is willing to take chances with these impostors, perhaps it is just as well to let the consequences be what they may.

THE average regular doctor howls like a stuck pig if he is asked to contribute any money for his own betterment or in his own defense. He even complains about the size of the dues he pays to his State Medical Association. When compared to the osteopaths, chiropractors, or members of any of the other pseudo-medical cults, he is a "piker," and he deserves to be classed with the cheap ones. In California the organized chiropractors spent \$64,211 in their campaign of 1922, and during the same year the organized osteopaths spent \$40,481. It is common knowledge that during the last two sessions of the Indiana legislature the chiropractors spent many thousands of dollars in the campaigns for recognition. The members of the regular medical profession spent less than five hundred dollars in their campaign to secure improved

medical legislation and to prevent our laws governing medical licensure from being lowered. What could be accomplished if every doctor in Indiana would give a little time and money to the question of medical legislation is beyond measure. It is remarkable that we accomplish as much as we do when there is so much indifference and parsimony exhibited.

MANY of the federal rules and regulations governing the affairs of men are irrational and inconsistent to say nothing of being burdensome. We always have felt that "red tape" reaches the limit when it comes to filing reports concerning the possession of narcotics, but of all the asinine requirements the worst is the one which compels physicians and others who procure and dispense narcotics to complete and file with the internal revenue office on *July 1* a detailed statement covering all narcotics purchased and dispensed up to and including *June 30*, and let it be known that if this report is not in the internal revenue office on the date mentioned a penalty is forthwith exacted. If the report is prepared and filed several days before the time limit, it of necessity does not cover the entire period required, and, being sworn to, subjects the sender to perjury. On the other hand, if the report actually covers the time required, and is sworn to, then it gets into the internal revenue office too late and the sender is penalized. There is no question about this penalizing business, as numerous persons have discovered. It is an idiotic system and makes one lose a little of his respect for governmental exactions.

THE Indiana State Board of Health is devoting considerable attention to baby clinics which are held in various communities throughout the State. No doubt these clinics are beneficial, and we are inclined to believe that they are conducted by persons who are reasonably careful in giving out information concerning the health of babies and growing children, and yet there is a tendency on the part of those who are conducting these clinics to give out untrustworthy suggestions and exaggerate the real principles involved. As a sample of this, the *Hammond Times* quotes one of the doctors connected with the child hygiene division of the State Board of Health as having said that "children having defective vision should have proper food rather than glasses," and perhaps some fond mothers have been led astray by this statement and removed the much needed glasses from her child's eyes after starting in on a diet plan suggested by those in charge of the baby clinic. While we doubt if the baby clinics reach the class of people that they are intended to reach, yet we believe that they are helpful, and the one thing to be guarded against by those in charge of the clinics is to avoid giving out statements or im-

pressions that may be misconstrued and offset any good that may be accomplished.

EVERYTHING points to another great war in Europe and some of the European statesmen predict that it will occur in the very near future. Whether the United States is going into such a war or not remains to be seen, but at all events our country will suffer along with the rest of the world. Even if not actually drawn into the conflict the ultimate results may be that the victors will dictate the rules of the international conduct which we may be forced to obey whether we like it or not. At present we are just as unprepared for war as we were at the beginning of the last great war, and we continue to be just as stupidly ignorant of the necessity of being prepared to protect ourselves at a vital moment. It would seem that we should profit by past experiences, but we have not done so, and if there is a demand for defensive action there again will be the same scramble to raise and equip armies and there will be the same criminal extravagance and general mismanagement of affairs. Of particular importance to medical men is the question of medical preparedness, and the possibility of securing an adequately equipped medical department of the army and navy. What are we doing? With wholesale honorable dismissal of many medical men from the army and navy it looks as though we are adding to unpreparedness.

THE New York State legislature has rejected the provisions of the Sheppard-Towner Act. The uplifters, most of them childless, and all of them bent on creating more bureaucratic government than we have now, probably will turn their attention to Illinois where acceptance of the Sheppard-Towner provisions is up for decision. If these self-appointed guardians of motherhood have their way, how long will it be before such a condition as exists in Soviet Russia will exist in America and the mother's conduct will be dictated by the government? In Soviet Russia the children are herded together under the care of the government and the results have been characterized as a crime which knows no parallel in the history of the world. As the editor of the *Illinois Medical Journal* well says, "every child is the ward of the government, parents are incapable of caring for their children, motherhood and birth control shall be established by law, the child taken from the mother's care and turned over to the officers, the State takes charge of the mother and being the supporter of the mother can take the right to dictate her course of conduct. If children are needed for the State, the State can force the bearing of children when and where it wills. This debauching of women carries its own boomerang. In this country are we not drifting toward the acceptance of the Soviet theories?"

THE April number of the *American Medical Association Bulletin* offers some pertinent comments on why some communities are without physicians, and publishes an illuminating letter from a doctor who formerly practiced in a small town, in which letter it is pointed out that the small towns never will have doctors unless the people get into the habit of giving their patronage and their confidence to their home town doctor and treat him with some degree of honesty and fairness. The residents of a small town complain bitterly if they do not have a doctor in their town and yet those same residents do not patronize the home doctor except in emergency and he is displaced by someone else as soon as the emergency has passed. It is a trait of human nature to think that you can get something a little better away from home, and we all suffer from this human frailty. The people in Podunk think they can get something better in the town of Squedunk, and those in Squedunk think that things are better if they come from Podunk, just as people in Chicago think that things are better if they come from New York, and people in New York think that things are better if they come from Paris, etc.; but the trouble with the doctor in the small town is that he can't draw enough from surrounding territory to offset the loss of patronage that goes out of his own town, and until the people in the small towns realize that they must show some loyalty to their home institutions, conditions never will improve so far as having competent medical services right at hand, and the sooner the people of the small towns learn this the better it will be for them.

IN certain quarters we hear a good deal about "health centers" and "health societies," and a few localities have undertaken to establish free clinics, always with the help of certain physicians who are either anxious to get into the limelight or are afraid that if they do not accept the responsibilities offered by the uplifters they may suffer in consequence. The matter has some serious aspects, as may be imagined, and to our notion most of the plans that have been offered are not for the sole purpose of benefiting suffering humanity but as a means of capitalizing sympathy and service for personal advantage. The California State Medical Society has reminded its members of the dangers of cooperation in agencies where supervision and control of medical men and medical services is contemplated, and announces to the citizens of California that it is not necessary for those needing medical services to apply to some non-medical organization in order to secure the services of any reputable physician. In fact, the society, through a resolution, announces to the public that the practice and policies of physicians everywhere, at all times, is to render services to any person requiring professional care, that those who are able to pay

the physician's regular fees for this service should do so; those who are able to pay part should do so, and those who are unable to pay for any of the service should have the service just the same, regardless of the status of the patient, and the services should be rendered in the same high grade, confidential, sympathetic manner. Furthermore, it never has been and is not now necessary to interpose any agencies not under the supervision and control of competent members of the medical profession between the physician and his patient. The office of each of the four thousand members of the California State Medical Society is a "health center" of a kind that gives the best medical and public health advice that physicians can give. This upon the basis that those who can pay in full should do so, those who can pay in part should do so, and those who are unable to pay should have the services without cost. The resolution provides that in order to secure special financial consideration the patient is requested to execute and sign a paper showing his financial status and setting forth briefly the reasons why he must ask for special consideration, this being the policy now followed by clinics and welfare organizations all over the State.

DEATHS

FREDERICK FALK, M. D., died at his home in Indianapolis, May 15 at the age of fifty years.

B. F. HUDSON, M. D., of Montezuma, died May 10. Dr. Hudson graduated from the Miami Medical College, Cincinnati, in 1857.

GEORGE K. HURT, M. D. of Indianapolis, died May 8 at the age of seventy-six years. Dr. Hurt graduated from the Medical College of Indiana, Indianapolis, in 1881.

FRANK JETER, M. D., died at his home in Indianapolis, May 20. Dr. Jeter graduated from the Eclectic College of Physicians and Surgeons, Indianapolis, in 1891.

THOMAS A. DRAKE, M.D., of Prairietown, was drowned in Hutton Creek, May 14. Dr. Drake was fifty-five years of age. He graduated from Rush Medical College, Chicago, in 1890.

WILLIAM P. WHERY, M.D., of Fort Wayne, died May 13 at the age of eighty-three years. Dr. Whery was a graduate of the Licentiate of the Royal College of Surgeons of Ireland in 1860.

NATHANIEL H. MANRING, M. D., of Elwood, died at his home April 20. Dr. Manring was seventy-six years of age. He was a graduate of the Indiana Medical College, Indianapolis, in 1876.

ALBERT E. TEAGUE, M. D. of Indianapolis died at his home May 23 as the result of heart trouble, at the age of sixty-five years. Dr. Teague graduated from the Eclectic Medical College, Cincinnati, in 1892.

T. E. BRUCE, M. D., of Clinton, died at the Augustana Hospital, Chicago, on May 15, age sixty years. Dr. Bruce graduated from the Vanderbilt University Medical Department, Nashville, Tennessee, in 1893.

ROY H. GERARD, M. D., died at St. Anthony's Hospital at Terre Haute, May 13. Dr. Gerard's home was in Crawfordsville. He was forty-eight years of age and graduated from the Medical College of Indiana, Indianapolis, in 1899.

L. FISHER LINDLEY, of Paoli, died May 5 at the age of seventy-seven years. Dr. Lindley graduated from the Detroit Medical College in 1870. He was a member of the Orange County Medical Society, the Indiana State Medical Association and the American Medical Association.

JAMES MATHEWS, M. D., of New Paris, died May 13. Dr. Mathews was seventy-six years of age. He was a member of the Elkhart County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Detroit Medical College in 1871.

J. M. THURSTON, M. D., of Richmond, died May 23, at the age of eighty-two years. Dr. Thurston graduated from the Physio-Medical Institute, Cincinnati, in 1866. He was a member of the Wayne County Medical Society, the Indiana State Medical Association and was a Fellow of the American Medical Association.

G. W. VARNER, M. D., of Evansville, died at St. Mary's Hospital, April 20. Dr. Varner was sixty-one years of age. He was a graduate of the Kentucky School of Medicine, Louisville, in 1886. He was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association and was a Fellow of the American Medical Association.

JAMES A. RAWLEY, M. D., of Brazil, died May 17 as the result of injuries received when a train struck his automobile. Dr. Rawley was fifty-three years of age. He graduated from the Illinois Medical College, Chicago, in 1904. He was a member of the Clay County Medical Society, the Indiana State Medical Association, and was a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE New York State Legislature has refused to accept the Sheppard-Towner Bill.

THE Vigo County Medical Society held its regular monthly meeting, May 15, at Terre Haute. A paper on "Focal Infections" was presented by Dr. D. H. Forsyth.

THE Tenth District Medical Society held a meeting at Gary, May 24. Dr. Nelson M. Percy, of Chicago, was the principal speaker, his subject being "Blood Transfusion."

THE Fountain Warren Medical Society held a meeting in Covington, May 7. Dr. William King, of the State Board of Health, presented a paper on "The Full Time County Health Unit."

PRESIDENT ANGELL, of Yale, has announced the establishment at Yale of the first university undergraduate school of nursing in the United States, the funds for which are to be provided by the Rockefeller Foundation.

THE Tri-County Medical Society, consisting of Bartholomew, Jackson and Jennings counties, held a meeting at Columbus May 8. Papers were presented by Dr. F. C. Walker, of Indianapolis, and Dr. C. J. McIntyre.

THE Howard University, of Washington, D. C., has received a pledge of ten thousand dollars from Mr. and Mrs. Aaron E. Malone. The pledge is given to the endowment fund of the school of medicine of Howard University.

THE Muncie Academy of Medicine held a meeting Friday, May 25, at the Hotel Roberts, Muncie. A paper was presented by Dr. Willis S. Lemon, of the Mayo Clinic, his subject being "Importance of Tuberculosis in Hodgkins Disease."

SEVEN counties, including St. Joseph, Fulton, Marshall, Elkhart, LaPorte, Miami and Kosciusko, were represented at the opening session of the South Bend Institute on Maternal and Infant Hygiene for Public Health Nurses, May 14.

THE headquarters of the next annual session of the Indiana State Medical Association will be at the Hotel Deming, Terre Haute. To be sure of accommodations, please write the Hotel as soon as possible, making reservation. Address Dr. C. N. Combs, Terre Haute, for rates at this or other hotels.

ANNOUNCEMENT has been made of the marriage of Dr. Albert E. Bulson, Jr., editor of *THE JOURNAL*, to Miss Memory Edith Breeden, on May 29th. They will be at home at 406 W. Berry street, Fort Wayne.

THE Fourth District Medical Society held a meeting at Greensburg, May 18. Papers were presented by Dr. Stemm, of North Vernon; Dr. Osterman, of Seymour; Dr. Overshiner, of Columbus, and Dr. Louis Frank, of Louisville, Ky.

THE Muncie Academy of Medicine held a meeting at the Hotel Roberts, May 18. A paper on "What Shall Be Done for the Victim of Lung Suppuration?" was presented by Dr. Evarts A. Graham, of Washington University, St. Louis.

THE Jay County Medical Society held a meeting at Portland, May 10. Dr. Foster, of Portland, read a paper on "Focal Infection, from the Standpoint of a Dentist," and Dr. Cring presented a paper on "Focal Infections from the Standpoint of a Doctor."

FROM a Brazil (Indiana) newspaper we have clipped the following:

"Chester Nevins underwent an operation at the Community Hospital, for inguinal abscess.

The operation was performed by Doctors Palm and Dilley.

DR. A. E. MORGAN, chief post surgeon of the Indiana State Soldiers' Home, at Lafayette, for the past twelve years, has resigned his position at that institution and has accepted a position on the medical staff of the National Military Home, Hampton, Virginia.

DR. OSCAR M. SCHLOSS has resigned his position at the Children's Hospital in Boston to occupy the position of Professor of Pediatrics in the Cornell University Medical School and to take charge of the New York Nursery and Child's Hospital, New York City.

THE Northeastern Indiana Academy of Medicine held a meeting at Auburn, May 31. A paper was presented by Dr. W. E. Shackleton, of Chicago, his subject being "Backache," and Dr. W. H. Holmes, of Chicago, presented a paper on "Diabetes and the Use of Insulin."

THE annual convention of the Indiana Eclectic Medical Association was held at Indianapolis, May 15 and 16. Dr. R. B. Douglas, of Terre Haute, was elected president of the association. Dr. John Swanson, of Fort Wayne, was made secretary and Dr. C. A. Tindall, of Shelbyville, treasurer.

DR. DOSTER BUCKNER, formerly resident physician at Irene Byron Tuberculosis Hospital, Fort Wayne, has announced his entry into private practice, limiting the field to the diagnosis and treatment of the diseases of the chest and to the administration of anesthetics, with office at 407 Noll Building, Fort Wayne.

THE Sixth District Medical Society held a meeting at New Castle, May 24. Papers were presented by Drs. Beverley Robinson, on "The Treatment of Ordinary Diseases"; C. H. Good, of Huntington, on "Ectopic Pregnancy"; Albert E. Bulson, Jr., Fort Wayne, on "Socializing Medicine;" V. H. Moon, Indianapolis, on "Heredity as a Factor in the Etiology of Carcinoma;" Clyde C. Bitler, of New Castle, on "A Few Remarks on Diabetes and Insulin."

THE annual meeting of the Ninth Councilor District Medical Society was held at Lebanon, May 24. Papers were presented by Dr. Byron N. Lingeman, of Crawfordsville, on "The Management of Laryngeal Diphtheria in Smaller Communities"; Dr. James G. Carr, of Chicago, on "Hypertension and Nephritis"; Dr. A. G. Chittick, of Frankfort, on "X-Ray in the Diagnosis of Gastro-Intestinal Diseases," and Dr. Charles B. Kern, Lafayette, on "Vomiting in Pregnancy." The Ninth District Society comprises Hamilton, Tippecanoe, Fountain, Warren, Benton, Clinton, Tipton, Boone and Montgomery counties.

GEORGE BRUNE SHATTUCK, M. D., died March 12, 1923, at his home in Boston after a protracted illness of several years. Dr. Shattuck was senior physician of the City Hospital, Boston, for many years and for a short time was an instructor in clinical medicine at the Harvard Medical School. He was president of the board of managers of the Massachusetts Charitable Eye and Ear Infirmary from 1902 to 1918, and of the Boston Medical Library for several years. Dr. Shattuck was president of the Massachusetts Medical Society from 1910 to 1912. He was editor of the *Boston Medical and Surgical Journal* from 1879 to 1912.

DURING May, the following articles have been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Non-official Remedies:

Connaught Antitoxin Laboratories
Insulin-Toronto

Insulin-Toronto—5 c. c. vials, 5 units in each cubic centimeter

Insulin-Toronto—5 c. c. vials, 10 units in each cubic centimeter

Mallinckrodt Chemical Works

Arsphenamine-Mallinckrodt

Arsphenamine-Mallinckrodt Ampoules, 0.1 Gm.

Arsphenamine-Mallinckrodt Ampoules, 0.2 Gm.

Arsphenamine-Mallinckrodt Ampoules, 0.3 Gm.
 Arsphenamine-Mallinckrodt Ampoules, 0.4 Gm.
 Arsphenamine-Mallinckrodt Ampoules, 0.5 Gm.
 Arsphenamine-Mallinckrodt Ampoules, 0.6 Gm.
 Arsphenamine-Mallinckrodt Ampoules, 1.0 Gm.

Barbital—M. C. W.

Cincophen—M. C. W.

Mercuric Cyanide—M. C. W.

Quinine Ethylcarbonate—M. C. W.

Parke, Davis & Co.

Pollen Extract Ragweed—P. D. & Co.

Pollen Extract Timothy—P. D. & Co.

Nonproprietary Article

Insulin

SOCIETY PROCEEDINGS

"LET'S GO—3000 MEMBERS FOR 1923"

To realize this, our President's slogan for this year, it will be necessary for every county society to increase its membership over that of 1922.

The following list comprises the counties who have already done this, and it is hoped that in the succeeding numbers of THE JOURNAL, this list will grow until it includes every county society. If the secretary of any of the smaller county societies will demonstrate to Dr. Combs that his county society cannot show further accessions because of the fact that every eligible doctor is already a member, the name of this secretary will be placed at the head of the list.

County	Secretary
1. Adams	B. F. Beavers
2. Dubois	W. D. Bretz
3. Elkhart	S. T. Miller
4. Knox	C. E. Stone
5. Noble	S. E. Munk
6. Whitley	F. G. Griser
7. Allen	D. D. Johnston
8. Boone	W. H. Spieth
9. Daviess-Martin	H. C. Wadsworth
10. Gibson	A. H. Rhodes
11. Rush	J. M. Lee
12. Shelby	F. E. Bass
13. Warrick	W. P. Ford
14. Floyd	P. H. Schoen
15. Fulton	A. E. Stinson
16. Huntington	M. G. Erehart
17. Monroe	F. H. Austin
18. Porter	C. H. Dewitt
19. Clinton	L. L. Harding
20. Howard	Florence Olmsted
21. Kosciusko	O. H. Richer
22. Lake	E. E. Evans
23. Marion	Wm. A. Doeppers
24. Posey	John Ranes
25. St. Joseph	R. B. Dugdale
26. Wayne	R. L. Hiatt

MUNCIE ACADEMY

Dr. Joseph Miller of Chicago, delivered an address before the Muncie Academy of Medicine, April 27, on the subject of "Protein Sensitization."

He called attention to the fact that many physicians believe urticaria, pruritus, angioneurotic edema, eczema, migraine, epilepsy, arthritis, iritis, asthma, and certain other diseases are the result of protein sensitization. Since certain diseases are the result of protein sensitization, then the rational treatment is to de-sensitize the body to these proteins.

Dr. Miller stated that in order to de-sensitize the human body to a protein, it is not necessary to use the specific protein that causes the disease. He believes that many other proteins when injected subcutaneously in the sensitized person will result in de-sensitizing that person. For example, peptone, typhoid vaccine, milk, tuberculin, or other proteins may be used to de-sensitize. He believes that if an organism be de-sensitized by means of the specific protein to which the organism is susceptible that the desensitized condition is more lasting than if some

other form of protein is used for the purpose of de-sensitization.

The doctor referred to a number of Japanese, German, English, French and American physicians who have done much work in protein de-sensitization. Quite a uniform result has been obtained by these various workers. For example, 20% of the cases of pneumonia and typhoid fever was reported as promptly cured by crisis, provided they received an injection of the proper amount of protein within the first 48 hours of the disease. Iritis usually yields promptly to this treatment, and many cases of trachoma and gastric ulcer have been benefitted by it.

Dr. Miller believes that many proprietary medicines owe their value not to the specific protein that they contain, but that they are valuable because they contain a protein. For example, he believes that vaccines, proteogen, phylaccogen, Coley's toxins, collargol, and many other proprietary medicines when used for the treatment of diseases produce beneficial results. He believes that this benefit derived from the use of these proprietary medicines does not depend upon the kind of protein they contain, but that equally good results would come from the use of other proteins.

There is a strong belief that in order to de-sensitize a patient it is necessary to give sufficient amount of the protein to cause a chill. However, some workers have found that they can bring about de-sensitization without producing a chill though certain kinds of protein are much more likely to produce a chill than others.

De-sensitization may be brought about by the use of peptone which is not likely to produce a chill. However, peptone has the disadvantage that it is very difficult to prepare and keep sterile. Most of the workers have used peptone or typhoid vaccine in bringing about de-sensitization.

Dr. Miller expresses a word of caution in the use of this line of treatment lest one unexperienced may do harm. However, he says he has never known of a bad result from the use of proteins when used to de-sensitize the human organism.

U. G. POLAND, *Secretary.*

WAYNE COUNTY

The Wayne County Medical Society passed the following resolutions on the death of Doctor J. M. Thurston which occurred May 23rd:

May 24, 1923.

"In the death of Doctor Joseph M. Thurston the Wayne County Medical Society has lost one of its useful members, one whose ability as an able physician and surgeon was recognized by all. He was a congenial co-worker, conscientious in his work and made great sacrifice to promote what he thought was right in his profession. He was fearless in his convictions and tireless in his devotion to his patronage.

"Our deepest sympathies are extended to his daughter and her family."

For the Wayne County Medical Society
 WALTER L. MISENER,
 RUSSELL L. HIATT,
 F. W. KRUEGER.

JAY COUNTY

At a recent meeting of the Jay County Medical Society the following officers were elected for the coming year: President, E. R. Hiatt, Penville; vice-president, A. C. Badders, Portland; secretary-treasurer, Harriet Wiley, Portland.
 HARRIET WILEY, *Secretary.*

FOURTH DISTRICT

The Fourth Councilor District Medical Society met in Greensburg, Friday, May 18th, 68 members being present. The meeting was called to order by Dr. Osterman of Seymour who introduced the new president, Dr. Grossman of North Vernon.

After the president's address the House of Delegates announced the following officers for the coming year: President, F. M. Mueller, Lawrenceburg; vice-president, Geo. T. McCoy, Columbus; secretary-treasurer, D. L. McAuliffe, North Vernon; councilor, C. E. Gillespie, Seymour.

In the afternoon the following program was given: "Acute Osteomyelitis," by Dr. Stemm of North Vernon, who stressed early diagnosis and thorough drainage. "Malignancy of the Breast," by Dr. Louis Frank of Louisville, Kentucky, who called attention to the necessity of removal of precancerous growth, followed by radiation. He emphasized the value of the use of radiation in the post-operative treatment of cancerous breasts. Dr. A. G. Osterman read a paper on "Focal Infection," in which he called attention to the necessity of careful study of all cases presenting symptoms of intoxication. Dr. L. Overshiner, having been called away, his paper on "The Significance of the Sphenopalatine Ganglion" was omitted.

The banquet in the evening, at which about 120 doctors and guests were present, was served by the local chapter of the Order of Eastern Star. Talks were made by Dr. Alfred Henry and Dr. John Sluss, of Indianapolis, and Dr. Tindall of Shelbyville. Roy C. Kanouse gave a monologue which was very entertaining.

The next annual meeting is to be held at North Vernon, May, 1924. Adjourned.

C. F. KERCHEVAL, Secretary.

TENTH DISTRICT

The Tenth District Medical Society met in Gary, May 24th. The Staff of Mercy Hospital acted as hosts. In the forenoon visitors were shown through the Gary schools through the courtesy of Dr. O. B. Nesbit. The afternoon was spent in a sightseeing trip through the steel mills by the courtesy of General Superintendent W. P. Gleason and Dr. F. W. Merritt, surgeon of the Gary Hospital. About one hundred members made the trip on cars provided by the steel company, accompanied by officers of the company who explained the various processes of making coke, steel, rails, wheels, etc. As there are two hundred and forty-five miles of railroad in the plant, it was not all covered in the time given to the trip, but everyone expressed himself as amazed and delighted with what he did see.

At six-thirty a banquet was served at the Gary Commercial Club. The guests were welcomed in a short speech by Dr. T. B. Templin, chairman of the staff, and by Capt. H. S. Norton, president of the Commercial Club. Dr. A. P. Leatherman, of Valparaiso, read a very interesting paper on "Reminiscences of Fifty Years of Medical Practice in Porter County, Indiana." Dr. Charles Spencer Williamson, of Chicago, gave a talk on the everyday affections of the heart, and brought out the importance of an early correct diagnosis and proper treatment fearlessly and properly applied. Dr. Nelson M. Percy read a paper on "Blood Transfusion," describing his technique and citing many instances where it had been a life-saving procedure.

Election of officers resulted as follows: Councilor, Dr. E. M. Shanklin, Hammond (re-elected); president, Dr. E. L. Schaible, Gary; secretary, Dr. G. H. Van Kirk, Kentland.

Next meeting to be held in the south end of the district either in September or October, the time and place to be determined later.

Adjourned.

E. E. EVANS, Secretary.

ELEVENTH DISTRICT

The regular meeting of the Eleventh Indiana Councilor District Medical Society was held at Kokomo, May 17, 1923, in the new Masonic Temple.

Dr. John Ridlon of Chicago, held a clinic in the morning, at which time he demonstrated the method and re-

duced a congenital dislocated hip joint. In the afternoon he read a paper on "Congenital Dislocations."

Dr. F. C. Mann of the Mayo Clinic, Rochester, read a paper on "Some Studies on the Experimental Production of the Peptic Ulcer."

The following officers were elected: President, George D. Miller, Logansport; secretary-treasurer, J. H. Reed, Logansport.

The next meeting will be held at Logansport, October 18, 1923.

Adjourned.

J. H. REED, Secretary.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

SKIABARYT FOR ORAL ADMINISTRATION.—A mixture of Barium Sulphate-Merck for x-ray diagnosis, 75 to 85 percent admixed with sugar, tragacanth, vanillin, cinnamon and cacao. A smooth mixture is made with water and this is then ready for drinking. Merck & Co., New York City. (*Jour. A. M. A.*, May 12, 1923, p. 1381).

SKIABARYT FOR RECTAL ADMINISTRATION.—A mixture of Barium Sulphate-Merck for x-ray diagnosis, 75 to 85 per cent, admixed with sugar, tragacanth, vanillin and cinnamon. A smooth paste is formed by addition of water and it is then ready for administration through the irrigator Merck & Co., New York City. (*Jour. A. M. A.*, May 12, 1923, p. 1381).

NEUTRAL ACRIFLAVINE.—It has the actions and uses of acriflavine (see New and Nonofficial Remedies, 1923). Being neutral in reaction, it is claimed not to have the smarting and irritating effects of acriflavine solutions. Neutral Acriflavine is a brownish-red, odorless, granular powder. It is soluble in less than 2 parts of water, forming a brownish-red solution which fluoresces on dilution and which has a bitter taste. The Abbott Laboratories, Chicago, Ill. (*Jour. A. M. A.*, May 19, 1923, p. 1455).

NEUTRAL ACRIFLAVINE-ABBOTT.—A brand of neutral acriflavine-N. N. R. It is sold in substance and also in the form of Tablets Neutral Acriflavine-Abbott, 0.03 Gm. and Enteric Coated Tablets Neutral Acriflavine-Abbott, 0.03 Gm. The Abbott Laboratories, Chicago, Ill. (*Jour. A. M. A.*, May 19, 1923, p. 1455).

PROPAGANDA FOR REFORM

INCOMPATIBILITY OF MERCUROCHROME-220 SOLUBLE WITH LOCAL ANESTHETICS AND ALKALOIDS.—An accident from the precipitation of mercurochrome-220 soluble by procain has been reported. The A. M. A. Chemical Laboratory has confirmed the incompatibility. The following local anesthetics were found to give precipitates when treated with mercurochrome-220 soluble solution: alypin, apothecin, benzocain, butyn, cocain hydrochlorid, B-eucain lactate, phenacain, procain, propaesin, quinin and urea hydrochlorid, ropacocain hydrochlorid and stovain. Many vegetable alkaloids were also found to be incompatible with mercurochrome-220 soluble.—(*Jour. A. M. A.*, April 14, 1923, p. 1091).

GLYCO-PEPTO MILK NOT ADMITTED TO N. N. R.—The Council on Pharmacy and Chemistry reports that Glyco-Pepito Milk is a sour milk said to contain *Bacillus bulgaricus*, *Streptococcus lacticus* and *Glycobacter peptolyticus*. The preparation is marketed by the Glyco-Pepito Manufacturing Co., Long Island City, N. Y., with the claim that its administration supplemented with a potato diet through the presence of *Glycobacter peptolyticus* permits the implantation of the Bulgarian bacillus in the lower intestine and thus brings about an almost complete disappearance of phenols and indoxyl from the urine. The Council reports that Glyco-Pepito Milk may be a pleasing beverage and light food, but that there

(Continued on Advertising Page xx)



Catgut Ligatures

Of great strength and absolute sterility. Boilable, Non-boilable, plain and chromic, also Iodized, 60-inch lengths.

Pituitary Liquid

Surgical 1 c.c. ampoules; Obstetrical $\frac{1}{2}$ c.c. ampoules, six in a box. Free from preservatives, physiologically standardized.

Relief for Hay Fever Victims

May be had by using Suprarenalin Solution or Ointment. Apply to nose, eyes and throat.

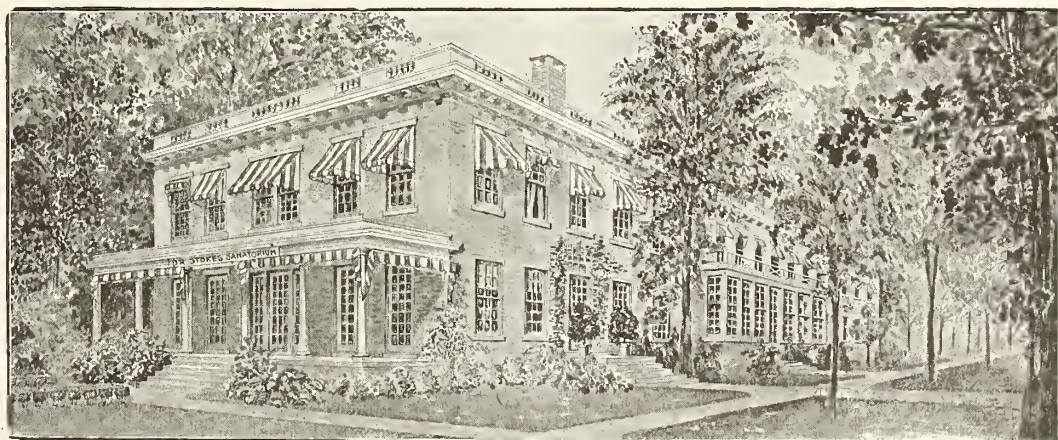
Suprarenalin Solution 1:1000 is stable, uniform and non-irritating.

Literature for Physicians

ARMOUR AND COMPANY

CHICAGO

DR. STOKES SANATORIUM



HOME FOR THE INCURABLE INSANE, AGED AND INFIRM

A strictly modern sanatorium, fully equipped for the scientific treatment of all nervous and mental affections. Situation retired and accessible.

Alcoholic and Drug Habit Treated by the Gradual Reduction Method Only

An addition of thirty rooms has lately been added to our already large sanatorium. This makes it possible for us to separate all male and female mental patients. For details write

DR. STOKES SANATORIUM

923 Cherokee Road

EDGAR W. STOKES, M.D., Supt.

Louisville, Kentucky

TRUTH ABOUT MEDICINES

(Continued from Page 216)

is no acceptable evidence for the many therapeutic claims that are made for it. The Council declared the preparation inadmissible to New and Nonofficial Remedies.—(*Jour. A. M. A.*, April 21, 1923, p. 1165).

HERRADORA SPECIALTIES NOT ACCEPTED FOR N. N. R.—Early in 1922 the Scientific Chemical Co., New York City (Marcus Aurelio Herradora, M. D., President), requested the Council on Pharmacy and Chemistry to consider his intravenous preparations. The firm sent specimens of the following products "for Intravenous Use": Herradora's Arsenic Compound, Nos. 1 to 6, Herradora's Arsenic and Hypophosphites, Herradora's Arsenic and Iron Compound, Herradora's Calcium Compound, Herradora's Calcium-Sodium-Glycerophosphate, Herradora's Chlorids Compound, Herradora's Chlorids with Iron Compound, Herradora's Creosote Compound, Nos. 1 and 2, Herradora's Digitalin Compound, Herradora's Glycerophosphate-Iron and Nickel Compound, Herradora's Guaiacol Compound, Herradora's Iodids Compound, Herradora's Hexamethylenamine and Guaiacol Compound, Herradora's Iron, Manganese and Nickel Compound, Herradora's Mercury Compound, Herradora's Quinine Compound, Nos. 1 and 2, Herradora's Sodium Iodid, Herradora's Sodium Iodid-Salicylate-Guaiacol Compound.

After examining the submitted evidence the Council concluded that the Herradora Specialties were inadmissible to New and Nonofficial Remedies for the following reasons:

1. The therapeutic claims advanced for them are unwarranted and exaggerated, and there is no evidence to warrant the intravenous administration of them.

2. With one exception ("Herradora's Sodium Iodid"), the preparations are mixtures of drugs the administration of which is not in the interest of sound therapy, particularly when these preparations are intended for intravenous use.

3. Herradora's Sodium Iodid is marketed with unwarranted therapeutic claims.

4. With the exception of Herradora's Sodium Iodid, Calcium Compound, and Iodids Compound, all of the Herradora Specialties are claimed to contain ingredients the identity and uniformity of which are not insured by their inclusion in the U. S. Pharmacopeia, National Formulary, or New and Nonofficial Remedies.

The Council submitted its objections to these Herradora Specialties to the Scientific Chemical Co. to permit the firm to meet these objections so far as possible. However, advertising mailed in February, 1923, convinced the Council that the propaganda contained in the firm's advertising is detrimental to the rational practice of medicine and the public welfare. Therefore, it authorized publication of its report.—(*Jour. A. M. A.*, April 28, 1923, p. 1259).

CARBON TETRACHLORIDE MEDICINAL-M. C. W.—A brand of Carbon Tetrachloride Medicinal-N. N. R. Mallinckrodt Chemical Works, St. Louis.

CARBON TETRACHLORIDE C. P. P. W. R.—A brand of Carbon Tetrachloride Medicinal-N. N. R. Powers-Weightman-Rosengarten Co., Philadelphia.—(*Jour. A. M. A.*, April 21, 1923, p. 1143).

MODIFIED PNEUMOCOCCUS VACCINE.—A vaccine or "antigen" prepared by digesting a suspension of pneumococci, types 1, 11, 111 and Group 4 at 37 C. until about 95 percent of the organisms have become gram-negative and the mixture is relatively nontoxic to guinea pigs. It is believed that this method yields a vaccine with greater protective power. There is some evidence that this vaccine is of value in the

treatment of lobar pneumonia. It is not intended for prophylactic use.

NEO-SILVOL.—A compound of silver iodid with a soluble gelatin base containing 18 to 22 percent of silver iodid in colloidal form. Neo-silvol, even in concentrated solutions, causes neither irritation of mucous membranes nor coagulation of albumin. It does not stain the skin. It is claimed that neo-silvol in laboratory tests for germicidal value has been found as effective as phenol in its action on bacteria. Neo-silvol is intended for the prophylaxis against, and treatment of, infections of accessible mucous membranes and is claimed to be indicated in affections of the genito-urinary tract and of the eye, ear, nose and throat. Parke, Davis & Co., Detroit, Michigan.—(*Jour. A. M. A.*, April 28, 1923, p. 1218).

PNEUMOCOCCUS ANTIGEN-LILLY.—A modified pneumococcus vaccine-N. N. R. It is marketed in 5 Cc. vials, each Cc. containing twenty billion partially autolyzed pneumococci. Eli Lilly & Co., Indianapolis, Indiana.—(*Jour. A. M. A.*, April 21, 1923, p. 1143).

SULPHARSPHENAMINE-SQUIBB.—A brand of sulpharsphenamine-N. N. R. (see *Jour. A. M. A.*, March 31, 1923, p. 919). It is supplied in ampules containing, respectively, 0.1 Gm., 0.2 Gm., 0.3 Gm., 0.4 Gm., 0.5 Gm., and 0.6 Gm. E. R. Squibb & Sons, New York City.—(*Jour. A. M. A.*, April 21, 1923, p. 1143).

BOOK REVIEWS

CLINICAL MEDICINE. Tuesday's Clinics at the Johns Hopkins Hospital. By Lewellys F. Barker, M. D., LL.D., Professor of Medicine Emeritus, Johns Hopkins University; Visiting Physician to Johns Hopkins Hospital, Baltimore, Md. Octavo of 617 pages, illustrated. Philadelphia and London; W. B. Saunders Company, 1922. Cloth, \$7.00 net.

The author well has said in his preface that medical teaching has undergone radical changes in the last few years, and at present it is the approved method of teaching the medical student to place him in contact with patients themselves. Thus the students work with teachers in the clinics and at the bedside, and in reality become assistants. They take histories, make physical examinations, perform various laboratory tests, and participate in the execution of therapeutic plans. The author's clinics at Johns Hopkins Hospital always have been excellent because of the thoroughness with which the investigations and remedial attention is carried out and the skill manifested by the distinguished clinician in charge. The book before us is the first of several that probably will follow, and is a reproduction of the author's clinics at Johns Hopkins Hospital as nearly as it is possible to reproduce them with words and illustrations and without the actual presence of the patient. The discussions are of a controversial nature between students and Dr. Barker, and such a scheme of presenting the subjects gives place to an analysis of clinical conditions, with resulting keener appreciation of conditions than otherwise would be possible through the ordinary description of the etiology, symptomatology and manifestations of disease. In other words, these clinics assume the character of a conference, with all of the data presented for analysis and final judgment, so that as a teaching factor they become of inestimable value. This first volume considers and presents examples of infectious diseases and diseases of the respiratory, circulatory, blood making and digestive apparatus, diseases of the uro-genital system, muscles, bones and joints, nervous system, metabolism and glands of internal secretion. The book will appeal to every clinician as well as student and deserves extended sale.

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XVI

JULY 15, 1923

NUMBER 7

ORIGINAL ARTICLES

SOME TYPES OF DYSPNEA

FROM THE DEPARTMENT OF MEDICINE, INDIANA
UNIVERSITY MEDICAL SCHOOL
JAMES WYNN, M. D.
INDIANAPOLIS, INDIANA

With the exception of pain, perhaps no evidence of disease is more distressing than the symptom dyspnea. Since the word dyspnea implies merely breathing associated with discomfort, the term is rather widely inclusive. In various nervous and metabolic conditions dyspnea may be one of a number of symptoms, a labored breathing which has no local pulmonary basis. Paroxysmal difficult breathing may occur in hysteria. If the hyperpnea of diabetic acidosis is associated with discomfort it becomes dyspnea, altho as in hysterical dyspnea the ventilating capacity of the lung is unimpaired. In these types unassociated with appreciable decrease in tidal air, the diagnosis of the general condition is usually obvious; and the proper therapeutic management of the general condition is the only very satisfactory treatment for the labored breathing.

In another group of cases the symptom dyspnea occurs as a probable consequence of decreased ventilating efficiency of the lung—an actual decrease in the vital capacity—whether it be due to temporary alveolar obliteration, bronchiolar spasm, or a combination of both. Several common clinical conditions occasion such vital capacity changes and consequent respiratory symptoms. The accurate differential diagnosis and appropriate treatment of these conditions are matters of considerable importance to the general practitioner as well as the internist.

I. THE DYSPNEA OF CHRONIC NEPHRITIS:

Herrick¹ long ago described the two characteristic types of difficult breathing observed in chronic nephritis—the severe paroxysmal and the milder, more or less constant dyspnea. The etiology of the latter is as yet but imperfectly understood. Often acidosis seems to be the causative factor, since the administration of alkalies and the subsequent rise in the plasma carbon dioxide combining power are followed by improvement.^{2,3} However, in well marked cases I have

occasionally seen no vital capacity change, no demonstrable cardiac element, and no acidosis or nitrogen retention (as judged by the usual standard of blood urea nitrogen content and carbon dioxide combining power.) Unquestionably there are other factors besides acidosis accounting for this respiratory difficulty, and satisfactory treatment can be evolved only when the condition is better understood.

The paroxysmal dyspnea occurring in chronic nephritis is probably due in a large measure to temporary vital capacity decrease. The attacks last usually several hours. They may exactly simulate true bronchial asthma in both signs and symptoms, or there may be the gurgling respiration, extreme cyanosis, marked local dullness and the crepitant rales of acute pulmonary edema. At best the prognosis is guarded, especially where the signs suggest edema. The indication is certainly for hypodermic administration of atropin in full dosage.

A case is illustrative: Case I. Mr. J. H., a case of cardiovascular-renal disease. F. H.—irrelevant. P. H.—much tonsil trouble in young adult life. P. I.—nocturia, headache, occasional vomiting for a year. Examination—marked peripheral sclerosis; B. P. 200/140; slight cardiac enlargement; no edema; phenolsulphonephthalein 35% in 2 hours; blood urea nitrogen 43 mg; fixation of urinary specific gravity and casts and albumen. Attack—one morning at 2 a. m. he became suddenly orthopneic, cyanotic, anxious. Breathing was audibly gurgling. Examination showed fine rales, dullness, and almost absent breath sounds over one side. The signs were new. Procedure—1/100 gr. of atropin sulphate was given by hypodermic. In about 20 minutes respiration was much easier and breath sounds more audible, though there were still numerous rales. By 10 a. m. all symptoms and signs of the seizure were gone except for a few musical rales.

II. THE DYSPNEA OF BRONCHIAL ASTHMA:

The clinical features of the asthmatic attack are typical—the sudden onset of expiratory dyspnea, associated with squeaks and groans in the chest, often harassing cough, and cyanosis. There is a decrease in vital capacity, but in the chronic asthmatic this persists to a certain extent even

between paroxysms. ⁴The attack may vary in length from a few hours to several days and may terminate with the profuse expectoration of eosinophile-rich sputum.

The treatment of the immediate attack calls for adrenalin, atropin, or morphin. Even the laity appreciate the merits of stramonium inhalations. (An old man now under observation can abort about half of his attacks by smoking his corn-cob full of an equal-part-mixture of tobacco and jimson weed.) Though the subject has been widely dealt with in the literature, it is an unfortunate fact that some men still persist in the abuse of morphin where the indication is for adrenalin. Morphin is indicated only after the failure of repeated injections of adrenalin or in the face of some definite contraindication to the drug. In the experience of the writer, orally administered adrenalin is useless, but even two or three minims by hypodermic will often abort an asthmatic attack; and one cubic centimeter given deep into the muscle will usually terminate a paroxysm or very greatly decrease its severity.

O'Hare⁵ has wisely urged caution in the use of adrenalin with essential hypertension patients. Though Sturgis and Wearn⁶ have shown that 0.5 c.c. of a 1-1000 solution given by hypodermic produces no appreciable blood pressure rise in normal individuals, the vascular system in hypertension is apparently much more sensitive to the drug. A few moments after hypodermic adrenalin injection O'Hare saw the systolic pressure jump 70 mm. in one case and from 193 to 280 mm. in another. For a few minutes there was in both cases severe angina and the sense of impending exodus. The elevation in pressure lasted for fifteen or twenty minutes.

What, then, is the margin of safety in the use of adrenalin with the hypertensive asthmatic? O'Hare never administers the drug when the systolic pressure is above 190 mm. In patients with a systolic pressure over 170 mm. and the diastolic over 110 mm., I have never injected appreciable doses without first determining accurately the effect on the blood pressure and the general condition of very small subcutaneous doses. That some hypertension cases can use adrenalin with apparent impunity for considerable periods of time is clear from the following case:

Case II: Mrs. L. C., a case of hypertension and asthmatic bronchitis. F. H.—irrelevant. P. H.—she has always been vigorous and active but a sufferer from perennial asthma since young girlhood. Examination—Cardiac enlargement. B. P. 180-190/110-100 for the past year, marked emphysema. Clinical—Note: for eight months prior to coming under observation and for some time since, she has given herself 0.5-1 Oc.c. doses of 1-1000 adrenalin hypodermicly. The interval between injections has never been greater than 7 hours. It is her only means of obtaining relief and there are no accompanying untoward symp-

toms. The systolic pressure often exceeds 210 mm. after injection but falls rapidly.

But the physician's obligation does not end with the termination of the asthmatic attack. In a decade when the relationship of bronchial asthma to the state of sensitivity to foreign protein has been clearly emphasized by so many workers, no case has been properly studied until any possible offending proteins have been identified. This necessitates a critical history and careful skin testing. False and misleading conclusions are only too often reached if the skin reactions are interpreted carelessly or by one who is not familiar with the variations which may occur within the limits of what the trained observer will recognize as normal. After a fairly extensive experience with skin testing, I feel certain that though the scratch test of Walker⁷ is the most reliable, more conservatism must attend its interpretation. Before one is justified in making a positive diagnosis, the site of scarification must show a wheal or the eczematous reaction, and these observations must be checked on at least two and preferably three different days, on different parts of the body. Once an etiological diagnosis has been made, an appropriate line of prophylactic treatment can be outlined. (These questions have been gone into in a previous paper⁸ and elsewhere.⁹)

In cases giving no cutaneous evidence of protein sensitivity, vaccine or non-specific protein therapy must be considered. Auld¹⁰ reports favorable results in asthma after the use of peptone solutions intravenously, but until the preparation of sterile, histamine-free peptone solutions become more simple, this kind of non-specific therapy can hardly be expected to enjoy very general usage.

III. THE DYSPNEAS OF CARDIAC DISEASE:

In two important types of cardiac patient tidal air decrease is associated with the symptom dyspnea.

(a) Frank decompensation: In frank decompensation there are the general evidences of circulatory failure—varying grades of edema, cyanosis, and cough, often with frothy bloody sputum. Over the pulmonary bases there are the evidences of passive congestion, dullness, distant breath sounds, and fine crackling rales. Furthermore, there are the physical signs of the existing heart lesion: in young patients usually enlargement and the murmurs of mitral or less commonly aortic disease, occasionally auricular fibrillation with the evidences of mitral stenosis. In patients over fifty years of age the picture is more commonly that of hypertensive myocarditis-enlargement, feeble sounds except for the accentuated aortic second, perhaps auricular fibrillation, and generally the evidences of hypertension with or without sclerosis.

The dyspnea of frank decompensation, being largely a matter of direct ventilating interference, calls for increased cardiac efficiency to overcome

the stasis in the pulmonary circulation. Administration of the so-called physiological dose of digitalis usually meets this need most spectacularly. For some time it has been pretty well recognized that the general attitude toward digitalis therapy has been too conservative. But only in the last few years has it been definitely appreciated that for any individual in state of decompensation there is a calculable amount of digitalis which will produce the optimal effect, and that this amount can be administered in relatively short time. Numerous methods for estimating the physiological dose have appeared in the literature^{11 12}. That of Christian is perhaps the simplest and the one best adapted for general use. The weight of the patient is determined in kilograms, due allowance being made for edema. This figure multiplied by thirty gives the physiological dose for the given patient, expressed in milligrams of the powdered leaf.

X

In the other form: $\frac{\text{X}}{2.2} \times 30 = Y$. When X—

2.2

the body weight in pounds, and y—milligrams of digitalis folia in the physiological dose.

While on several occasions I have given the entire physiological dose at once, it is generally better, unless the patient is under careful hospital supervision, to divide the dose into thirds or quarters, to be given at 7 to 12 hour intervals. There may be cardiac evidences of digitalis effect as early as 2 to 4 hours after administration¹³ and by the time the physiological dose has been given (24 to 36 hours) the general improvement is usually striking, as evidenced by decrease or disappearance of dyspnea, diuresis, decrease or edema, slowing of the apex rate in fibrillators, and approximation of the apex and radial rates in cases which have previously shown deficit. Frequently the vital capacity will increase 400-500 c.c. in the first 24 hours.¹⁴ The effect persists for varying periods, and it will usually be found possible to maintain a fair state of compensation by starting 0.1 to 0.2 gram doses of digitalis folia twice a day a few days after digitalization has been effected. Variations in the amount of this "holding" dose must of course be made to suit the individual case. The following case illustrates well the effect of the physiological dose of digitalis in frank decompensation:

Case III: Miss L. S., a case of hypertensive myocarditis and arteriosclerosis. F. H.—irrelevant. P. H.—no acute illness. P. I.—dyspnea on exertion for 6 months and moderate edema of the extremities, becoming very marked the last month. Examination—marked peripheral sclerosis, B. P. 210/130, anasarca (hydrothorax, ascites, etc.). Cardiac hypertrophy, auricular fibrillation (pulse 90, apex 160), and marked cyanosis. Procedure—three 0.7 doses of digitalis folia were given at 7 a. m., at 7 p. m., and 7 a. m. of the second day. By morning of the second day the

dyspnea had markedly decreased, and by afternoon she could breathe comfortably with a two-pillow back rest. A diuresis began the evening of the second day, and the radial and apex rates were 94 and 100 respectively.

(b) *Latent decompensation*: The dyspnea of latent or impending decompensation has characteristic features. It is not as pronounced as the breathlessness of frank decompensation, but rapidly becomes so on any very active exercise. Nocturnal accentuation is the rule. It is seen commonly enough in cases of hypertension—especially of the so-called essential variety. The following is a fairly typical case:

Case IV: Mr. L. K., a case of hypertensive myocarditis and arteriosclerosis. F. H.—irrelevant. P. H.—recurrent sinus trouble. P. I.—weakness, fatigue, and marked dyspnea on moderate exertion for 8 months. Examination—pallor, marked peripheral sclerosis, B. P. 250/130, cardiac enlargement, sounds feeble but rhythm regular. Liver edge 4 cm. below the costal margin. No edema. Renal function good. Procedure—0.1 gm. digitalis folia was given twice a day. In a week the liver edge was at the costal margin, the dyspnea was much improved. After 2 days rest, the same dose was resumed, with another brief rest period in a week. On this regime the man can do light house work with no breathlessness.

In this case the physiological dose of digitalis was not given. Relief of the dyspnea was prompt and lasting when 0.1 gram doses were given twice a day, with rest periods as indicated. Such a general scheme of digitalis administration yields frequently most gratifying results with these patients. If advanced nephritis complicates the hypertension, much less satisfactory results are to be expected.

It will be noticed, digitalis doses have all been expressed in terms of the powdered leaf. The superiority of this form of the drug lies in the fact that it permits of absolutely accurate dosage. Levine¹⁴, observing the cardiac patients in the hospitals of one sector in France, was appalled at the great variation in number of "minims" in a cubic centimeter. It is an only too common experience in dispensary practice to find the 15 drops of an ordinary medicine dropper masquerading as 15 minims. With powdered leaf administration there is no "minim-drop" fallacy.

SUMMARY

In several common clinical conditions the symptom dyspnea is associated with pulmonary vital capacity decrease. The treatment of these dyspneas depends on underlying cause.

(1) *Chronic Nephritis*. The labored breathing of chronic nephritis may be mild and more or less constant, or distinctly paroxysmal. In the milder form the occasional relief after alkali administration suggests that acidosis occasions the

dyspnea. However, it is clear there are other, as yet imperfectly understood factors responsible. The lowered vital capacity of transient pulmonary edema and bronchial spasm is probably largely responsible for the paroxysmal labored breathing, and atropin is of considerable value in cases of this type.

(2) *Bronchial Asthma.* The dyspnea of bronchial asthma is easily recognized. In treatment of the paroxysm, morphin is not indicated unless adrenalin or atropin have proved ineffective or are contraindicated. (The necessary precautions in use of adrenalin are emphasized.) The physician's obligation to the chronic asthmatic is not discharged with the termination of the attack. Careful etiologic study of the case and recommendations for prophylaxis are merely his duty.

(3) *Chronic Cardiac Disease.* The dyspnea of cardiac decompensation, whether established or merely impending, is best treated with varying doses of digitalis. A method of estimating and administering the physiological dose is reviewed and the use of smaller dosage discussed.

REFERENCES

- (1) Herrick, J., Chronic Interstitial Nephritis, *Modern Med.*, Vol. 6, Lea & Febiger Co, 1909, p. 175.
- (2) Chase, A. F., and Myers, V. C., Acidosis in Nephritis, *J. A. M. A.*, Mar. 6, 1920, Vol. 74—10 p. 641.
- (3) Cornell, B. S., Clinical Evidences of Acidemia in Chronic Nephritis, *J. A. M. A.*, Mar. 12, 1921, Vol. 76—11, p. 715.
- (4) Walker, I. C., *Bronchial Asthma*, Oxford Medicina, Vol. 11, p. 217.
- (5) O'Hare, J. P., Vascular Reactions in Vascular Hypertension, *Amer. Jour. Med. Sc.*, 159, Mar., 1920, p. 369.
- (6) Sturgis, C. C., and Wearn, J. E., Effects of Epinephrin on the Basal Metabolism of Soldiers with "Irritable Heart," in hyperthyroidism, and in Normal Men, *Arch. Int. Med.* XXIV, Sept., 1919, p. 269.
- (7) Walker, I. C., Cutaneous and Intradermal Tests, *J. M. Research*, 37, Nov., 1917, p. 287.
- (8) Wynn, J., Sensitivity to Epidermal and Pollen Proteins, *J. Indiana M. A.* 16:1-6 Jan. 1923.
- (9) Walker, I. C., Causes and Treatment of Bronchial Asthma, *J. A. M. A.*, 69, Aug. 4, 1917, p. 363.
- (10) Auld, A. J., Results of Peptone Treatment of Asthma, with a Note on the Treatment of a Certain Pathologically Allied Condition, *Brit. M. J.* 1—567, April 24, 1920.
- (11) Eggleston, C., Administration of Digitalis by the "Eggleston Method", *J. A. M. A.*, 74, Mar. 13, 1920, p. 733.
- (12) Christian, H. A., Digitalis Administration, *Amer. Jour. of the Med. Sc.* 157, May, 1919, p. 593.
- (13) Eggleston, C., Digitalis, *Arch. Int. Med.*, Aug., 1922.
- (14) West, H. F., and Pratt, J. H., Clinical Experiences with a Standardized Dry Aqueous Extract of Digitalis, *J. A. M. A.*, 75—277, July 10, 1920.
- (15) Levine, S. A.—Personal Communication to the Author.

DIGITALIS THERAPY*

EDGAR F. KISER, M.D.

INDIANAPOLIS

It has been said, and very truly I believe, that "The weakest link in the chain of clinical medicine is the application of correct treatment". Within my own recollection the therapeutic pendulum has swung repeatedly from absolute nihilism to unreasonable polypharmacy. The only interpretation of this is lack of confidence in, or lack of knowledge of, the action of drugs. Certainly every intelligent physician believes in the efficacy of well-directed medication. and one

should acquaint himself thoroughly with the action of a few useful drugs and then use them when they are indicated.

Of such potent drugs there is perhaps no one of greater clinical value than digitalis. Used intelligently it promotes well-being, increases comfort, and oftentimes actually saves life. But its intelligent use is practically restricted to just a single pathological entity, and that is cardiac decompensation. Henry Christian¹ has recently epitomized the indications for digitalis therapy in the following paragraph: "Digitalis is good for the symptoms and physical signs the patient has, provided these symptoms and signs are the result of cardiac insufficiency—that is, decompensation. The indications for starting digitalis therapy are the presence of symptoms and physical signs which are the result of cardiac insufficiency—that is, decompensation. The symptoms and physical signs of cardiac insufficiency are breathlessness, cough, cyanosis, edema, pain, weakness, nausea, vomiting, enlargement of the liver, decreased urine output, rapid pulse."

Let us consider these signs of decompensation as enumerated by Christian, seriatim.

First, breathlessness: Dyspnea is, from the standpoint of the patient, perhaps the most distressing symptom of cardiac failure. In its earliest stage it is manifested as a result of some physical strain, oftenest perhaps climbing stairs. The patient is conscious of a sense of oppression or exhaustion after he has ascended one or more flights of steps, and as the myocardium becomes more and more unable to cope with the burden imposed upon it, the breathlessness becomes more and more pronounced—becomes an actual air hunger—and results from only minor effort. Breathlessness is not infrequently accompanied by sub-sternal oppression, and the patient thus afflicted is indeed most uncomfortable.

Second, cough: Cough resulting from cardiac insufficiency is frequently misinterpreted as resulting from bronchitis. Because of the relative pulmonary edema which results from impaired circulation, moist rales over the bases are common and oftentimes lead to a mistaken diagnosis. Within the past few weeks I have seen a patient whose stubborn cough failed to respond to vaccine treatment given him by an internist of no mean ability, but which was entirely relieved within a few days by digitalization. The cardiac factor in the case had been entirely overlooked.

Third, cyanosis and edema: These are common symptoms of chronic myocarditis. Parenthetically, the terms "chronic myocarditis", "cardiac failure", "cardiac insufficiency", and "decompensation" are loosely used as exactly synonymous, the particular term depending upon the custom of a given community. Cyanosis of the nails and mucous membranes is obvious to even the casual observer. Edema varies in degree and in location. It is perhaps oftenest found in the lower

*Read before the Second District Medical Society, Washington, Indiana, April, 1923.

extremities, or just above the sacrum, and may vary in degree from mere pitting on pressure in these localities, to ascites or general anasarca.

Fourth, pain: Pain is a frequent accompaniment of cardiac decompensation. It is variously manifested, but oftenest perhaps as substernal pain and oppression, or as precordial distress. Hyperaesthesia over the precordium is likewise common, and sensitive patients will not infrequently complain of the pressure of the stethoscope during examination.

Fifth, weakness and fatiguability are exceedingly common in these patients and are, of course, frequently associated with dyspnea, as has been previously mentioned.

Sixth, nausea and vomiting: Nausea and vomiting, many times in association with enlargement of the liver, are frequent symptoms. It is of utmost importance to distinguish the nausea and vomiting of cardiac insufficiency from the nausea and vomiting which are often the accompaniment of digitalis administration.

Seventh, decreased urinary output and rapid pulse: These symptoms often are evidence of a failing heart; but rapid pulse alone cannot be interpreted as due to cardiac insufficiency, and tachycardia *per se* is not an indication for digitalis therapy.

These, then, are the signs and symptoms of cardiac failure, and upon their recognition and proper interpretation depend successful treatment; nor is it sufficient to recognize them when they are so far advanced that he who runs may read. Their early recognition is of prime importance that the damaged organ may be repaired while repair is yet possible.

Having diagnosed cardiac insufficiency, the therapeutic measures with which we may combat it are definitely indicated, and fortunately, as a rule, promise much in the way of relief. Of rest, diet, and similar measures, I shall not speak. I shall confine myself entirely to a consideration of the therapeutic application of digitalis to the treatment of decompensation. I have nothing original and nothing new to present, but wish merely to outline a method of treatment which is simple, practical and efficient.

The drug market is flooded with preparations of digitalis, many labeled with fancy names and commanding fancy prices, each claimed to be especially potent and free from the disagreeable effects upon the stomach for which digitalis is notable. Most of these preparations have been weighed and found wanting. Levine² has examined many of the French preparations which have a vogue in this country and has found that they vary in strength to such an extent as to make their employment impractical and unsatisfactory.

Of the pharmacopeial preparations those most commonly employed are the infusion, the tincture, and the powdered leaf.

The infusion, to be of any value, must be

freshly prepared. Pomeroy and Heyl found that most infusions were worthless at the end of from three to five days; and even if freshly prepared, their potency depends upon the skill of the pharmacist and the activity of the leaves from which they are made.

Tinctures prepared by reliable pharmaceutical laboratories are dependable, but here again much depends upon the freshness of the preparation, for tinctures, too, are apt to deteriorate rapidly. Pottenger, in his text-book on Biological Chemistry, reports the assay of 51 specimens of tincture of digitalis with a variation in strength of from naught to 444 percent of the standard. Another practical and very serious objection to the use of tincture is the variation in dose which comes from the common practice of confusing minim with drop. Fifteen minims equal a cubic centimeter, but the number of drops which equal a cubic centimeter varies with the dropper. I have recently tested a number of ordinary medicine droppers and found a variation of from 25 to 45 drops to the cubic centimeter, while experiments at the Peter Bent Brigham Hospital made some time ago showed a variation of from 30 to 56 drops. It is obvious then that most patients taking tincture of digitalis are receiving considerably less of the drug than the physician really prescribed, and this no doubt accounts for many digitalis failures.

Thomas J. O'Brien³, in a most practical article which appeared recently in the *Boston Medical and Surgical Journal*, says: "The whole leaf possesses all the valuable properties of digitalis and is the best way of giving this important drug." I heartily concur in this opinion. I have found it to be dependable and the results uniformly satisfactory. It is of prime importance that the drug be reasonably fresh and that it be prepared from leaves whose potency is assured. To secure these attributes it is necessary that the powdered leaf be secured from a pharmaceutical house whose label is an assurance of quality. It is best administered in the form of a pill or a capsule made from the powdered leaf, and as a matter of convenience prepared in doses of three-fourths of one grain, and one and one-half grains. I believe it best that this particular drug be dispensed by the physician himself and that it be given under his personal direction and observation.

The best results are obtained in patients who have had no digitalis during a period of two or three weeks prior to the contemplated digitalization. The digitalizing dose is 30 to 35 mg. per kilogram of body weight, given within a period of two or three days. Reduced to more familiar terms, about 30 grains of powdered digitalis for the average patient weighing 150 pounds. In detail, of this quantity one-fourth, or seven and one-half grains, is given on the morning of the first day of treatment. This dose is repeated on the evening of the first day. On the morning

of the second day one-fourth of the remaining 15 grains, or three and three-fourths grains, is administered, and this dose repeated on the evening of the second day. The remaining seven and one-half of the 30 grains is given in divided doses on the third day—if its use is deemed necessary. This schedule must of course be varied to meet the requirements of each individual case, but will in the main act as a reliable guide for most patients.

The evidence of effective digitalization is slowing of the heart rate, and in the case of auricular fibrillation, obliteration of the pulse deficit. After the patient has been effectively digitalized a maintenance dose of three-fourths to one and one-half grains of powdered digitalis per day may be necessary and may be continued over a long period of time. In some cases this will not be required. I now have under observation two cases of mitral stenosis with insufficiency, one a fibrillator, the other with regular rhythm, neither of whom has required any digitalis since digitalization nearly six months ago.

Concerning digitalis in patients with regular rhythm, contrary to the opinion of many clinicians I believe that it may be used with striking benefit, but it is possible that one must be more cautious in its administration than if the patient had fibrillation.

The toxic effects of digitalis are nausea, vomiting, and certain types of arrhythmia, especially digitalis coupling. If these toxic symptoms manifest themselves the drug must of course be discontinued. Nausea is perhaps the most disagreeable feature of any digitalis regime, and I believe that it does not make any great difference what preparation is used. The various proprietaries, fat-free tinctures, etc., are none the less apt to produce this symptom than is the powdered leaf. Again quoting Christian¹: "I doubt whether it is very likely that a digitalis preparation will ever be produced which will give satisfactory digitalis effect and not cause nausea. I even question whether such a preparation is really desirable. Nausea is, after all, a very useful, easily recognizable effect of sufficient digitalis, and so serves a very useful purpose in digitalis therapy."

What of digitalis given hypodermatically? There are many preparations available, most of which have some merit. But they are not necessary in any case where the patient is sufficiently conscious to take medicine by mouth and retain it. Patients *in extremis* with a specific indication for digitalis are best given strophanthin intravenously. Its action is rapid and positive.

Now please let me repeat that the administration of digitalis does not by any means constitute the sum total of the treatment of heart disease. Rest, regulation of the mode of life, and of the habits, attention to diet, venesection when indicated, are of prime importance and must be supervised carefully. What I do wish to emphasize

is the practicability of the method of digitalis administration that I have outlined above. It lends itself well to the requirements of the general practitioner and produces results that are uniformly satisfactory.

1. Henry A. Christian, Boston Med. & Surgical Journal, 187, p. 47, July 13, 1922.
2. Personal communication.
3. Thos. J. O'Brien, Boston Med. & Surgical Journal, July 27, 1922.

ADENOMA OF THE PROSTATE GLAND*

C. M. Mix, M.D.

MUNCIE

This paper is based on observations in the care of eight cases operated since January 1, 1920. In this series there was no mortality and all have recovered. None complained of loss of sexual vigor dating from prostatectomy. An equal number of cases were reported by me in 1916. In the former series there were two deaths due to error in judgment on my part in estimating the patient's general powers of resistance. Both of these patients, however, insisted on going home very soon after operation and were thus deprived of the benefit of hospital care during their convalescence.

History—"Although the prostate was first described by Massa in the sixteenth century, it was not until the seventeenth century that Riolan discovered that obstruction to urination could be produced by its enlargement. His observation, however, was very little noticed. A little later Morgagni gave an excellent description of the pathology and complications of certain cases of prostatic enlargement. Since then Hunter, Home, Brodie, and Thompson in England, and Civiale and Mercier in France, have been the pioneers in this field of pathology and surgery.

"In recent years there have been many workers on the surgery of the prostate, among whom may be mentioned Mercier, who advocated snaring or destroying the median lobe through the perineum in 1856; Bottini, who introduced the galvanocautery treatment through the urethra in 1874; Kuchler, who described a radical operation for prostatectomy which he carried out on the cadaver in 1866; Billroth, who practiced this operation on the living subject in 1867; Gouley, who laid down the principles for enucleation of the prostate through the perineum in 1874; Leisrink, who in 1882 did the first total extirpation of the prostate and sutured the divided ends of the urethra; Belfield and McGill, who independently in 1887 enucleated the whole gland more or less completely through a suprapubic incision; Watson, who in 1888 published a handsome monograph demonstrating the possibilities of perineal prostatectomy; Goodfellow, who in 1890 began the first systematic enucleation of the gland

*Presented before Delaware-Blackford County Medical Society, March, 1923.

through the perineum; Fuller, who in 1895 carried out systematic suprapubic enucleation of all the prostatic lobes; White, who in 1803 suggested castration, and Harrison, who introduced vasectomy in 1893."—*Keene's Surgery*.

Since 1900 there have been a vast number of articles upon the surgery of the prostate and numerous operative procedures have been advocated. Many of these have been attempted in only a few cases. Those which have won distinct recognition and are used today are as follows: Methods of perineal prostatectomy as practiced by Goodfellow, Alexander, Syms, Murphy, Ferguson, Bryson, and Young. Methods of suprapubic prostatectomy as practiced by Fuller and Freyer, Judd, and many others. The Bottini operation as carried out with the instruments of Freudenberg, Young, and Chetwood.

The suprapubic operation described by Fuller of New York, first taken up and popularized by Freyer of London, and modified by Judd, has been generally accepted as the operation of choice by the great majority of surgeons throughout the world today. The choice of the suprapubic or perineal route must rest first upon its mortality and second upon its results. Deaver, writing in 1914, said that the mortality following prostatectomy by the general surgeons throughout the United States was 20 per cent, but that of the genito-urinary surgeons was 6 per cent; since that time the mortality has been decreased materially so that in the past three years reports of from 100 to 300 consecutive prostatectomies by the suprapubic route without a death have been reported. Young, of Baltimore, likewise reports a series of about 300 cases by the perineal route with no mortality. Young practically stands alone today as an advocate of the operation perineal prostatectomy. That the mortality in competent hands has been reduced almost to zero by either method of approach has been amply proven; consequently the choice of method must rest on the results. C. W. Hunt of the Mayo Clinic says: "The perineal and suprapubic operations carry an equally low mortality; the advantages of the suprapubic operation are the direct approach to the portion of the prostate involved in benign hypertrophy, rarity of injuries resulting in fistulas and incontinence, accuracy of technique and a thorough exploration of the bladder."

That recto-urethral fistulas follow perineal prostatectomy is unquestioned; likewise incontinence of urine is fairly common following the perineal route and almost never follows the suprapubic. The utterly miserable condition of the patient suffering from either of these complications is such that life becomes a burden. The reason that incontinence follows the perineal operation is that the external stronger sphincter of the bladder, called the cut-off muscle, is injured frequently in the perineal operation, and never in the suprapubic.

The choice of operation and the improvement in technique, though important, have not been the most important factors in changing the status of prostatic surgery from the extreme mortality of the early days of 1900-1910 to the safe and satisfactory operation of today. This marvelous improvement in results is one of the brilliant achievements of modern medicine and surgery.

In order to appreciate how this has come about it is necessary to go into some detail as to the etiology, pathology, symptomatology and sequelæ of the obstructing prostate.

ETIOLOGY: Race—Hypertrophy of the prostate occurs almost never in the negro. I have seen but one. This was a negro 80 years old operated at the New York Hospital in 1903. Age—According to most investigators adenomatous hypertrophy occurs in 60 per cent of all men over 50, though only 34 per cent of these show symptoms requiring treatment. E. S. Judd of the Mayo Clinic in examining 100 cases of men over 50 who came to the Clinic for various complaints other than genito-urinary, reports that 44 had a slight but easily recognized enlargement, and the remaining 56 a more marked enlargement. In 59 of the 100 cases the urine was normal; 36 showed pus; 36 had nocturia; 42 had no evidence of trouble from the enlargement; 14 complained of some difficulty in starting the stream and of frequency in cold weather; a few complained of dribbling. Judd states that it is his opinion that hypertrophy of the prostate is almost universal in men over 50 years old.

PATHOLOGY: The so-called benign prostatic hypertrophy is now held to be in the nature of an adenoma, beginning in the tubules which represent the parenchyma or secreting portion of the gland. This adenomatous growth may originate in one of the two lateral lobes or the middle lobe, infrequently in the posterior lobe, and very rarely in the anterior lobe. This adenomatous overgrowth comprises by far the majority of prostatic enlargements, but in addition there is a smaller number due to chronic inflammation of the prostate. The triangular ligament prevents the prostate from pushing downward so that it grows up into the bladder following the line of least resistance. As the gland enlarges by pressure against the true capsule there is a condensation of the fibrous tissue in the periphery of the prostate, producing the so-called false capsule within which enucleation of the adenomatous growth is usually done. The compression of the prostatic urethra by this growth inside its unyielding envelope produces the obstruction of the urinary flow from the bladder.

SYMPTOMS: In the beginning the symptoms of prostatic obstruction are purely mechanical, and consist of frequency and burning; painful micturition; slowness and difficulty in starting the stream, especially on first arising in the morning and getting up once or more at night to pass

water; later on, after catheterization becomes necessary, the element of infection comes in, producing cystitis, pyelitis, etc. Due to the obstruction and to the bulging of the prostate into the bladder the amount of residual urine gradually increases, and back pressure on the kidneys retards their function. The development of symptoms is usually gradual, though the first warning may be an acute retention. The bladder, unable to empty itself completely and easily, gradually hypertrophies; then as back pressure becomes greater the bladder dilates, the muscular coat becomes thinned out, trabeculation and diverticulæ may develop. The stagnation of urine favors the formation of stone. The urethral orifices at first under normal bladder pressure hold the urine from backing up into the ureters and pelvis of the kidney; finally their valvelike action is overcome, and the urine backs up into the ureter and kidney pelvis until the kidneys are forced to secrete against a considerable back pressure. This overdistends first the bladder, then the ureters, and finally the pelvis of the kidneys, producing the "prepared field" so graphically described by Hugh Cabot at a recent meeting of the Academy.

The stage is all set for the advent of infection. About this time the patient suddenly finds that he is no longer able to empty his bladder at all after prolonged effort, and after the bladder has—as is often the case—become enormously distended, resort is had to the use of a catheter. As Hugh Cabot has shown, the passage of a catheter in the case of a normal bladder will very seldom cause infection, no matter whether rigid aseptic precautions are used or not, but with the extensively congested bladder mucosa of the overdistended bladder infection is almost sure to occur; once infected the bladder rarely becomes permanently clean again. Pyelitis of one or both kidneys eventually develops, with gradually declining kidney function, uremia and death.

Urine obstruction may be due to hypertrophy, stricture, prostatitis, cancer of the prostate and spinal disease. Stricture is easily diagnosed by inability to pass a sound without meeting obstruction; prostatitis gives a history of old or recent urethritis; cancer is recognized by its almost constant appearance in the posterior lobe and extension to the trigone. The incontinence of obstruction is not a true incontinence but the overflow of an already distended bladder. In true incontinence the bladder is always empty, the urine passing out as soon as it enters the bladder. True incontinence is usually due to spinal cord disease and most frequently found in locomotor ataxia. Even if hypertrophy is found to coexist with spinal cord incontinence nothing would be gained by prostatectomy.

The chief factors in the great improvement in the results of prostatectomy in the past few years are: First, recognition of the fact that prostatectomy is never an emergency operation. Sec-

ond, the principle of the two-stage operation. As Hugh Cabot so aptly puts it, "You cannot infect the bladder and remove the prostate at the same time without courting disaster."

In the successful management of cases of prostatic obstruction, the choice of operation, or whether or not operation should be performed, must be given careful consideration. One must take into account the amount of primary change in the prostate itself, the secondary effects on the genito-urinary tract, and, last but not least, the general condition of the patient. Due partly to the age of the patient, but largely to the effect of residual urine and its back pressure on the kidneys and resultant infection and pyelonephritis, most patients coming for relief must be considered as potentially uremic. The important points in physical examination are the specific gravity of the urine, presence and amount of pus, the phenolphthalein functional test and the blood nitrogen test.

Most of these cases come to us as acute emergencies. The patient, either before or after catheter life has been instituted, develops acute retention and after futile attempts have been made to pass a catheter and much damage already has been done by instrumentation resulting in hemorrhage and clots in the bladder, comes to the hospital for relief. These patients should never be subjected to prostatectomy at this time. The first and absolute necessity is to relieve their distended bladders. Right here comes in the most serious danger to these patients. If the pressure is relieved suddenly there occurs an intense congestion of the kidneys that results in an acute nephritis which often proves fatal.

If a catheter can be passed readily it is best to partially empty the bladder and repeat the catheterization at frequent intervals until *t. i. d.* catheterization will keep the bladder empty. In case a catheter cannot be passed readily, which often is the case, a suprapubic puncture is made under local anesthesia and the bladder gradually emptied at several sittings until continuous drainage can be instituted. In the latter case, after intermittent catheterization has been done a few days and the urethra becomes somewhat tolerant to the presence of a catheter, a catheter may be anchored in, and in that way continuous drainage established. Following any of these measures, no matter how carefully done, there is a period of reaction characterized by a fall in blood pressure and the specific gravity of the urine, restlessness, sleeplessness, loss of appetite, dry red tongue, etc. In other words the patient is on the verge of or actually develops uremia. Under appropriate treatment, preferably in the hospital, the patient gradually improves and after a few weeks to a few months gets to feeling better than for years. It is at the height of this period of improvement that prostatectomy can be done with almost no mortality.

In some cases, especially when the bladder is extensively infected, the suprapubic puncture and permanent tubage of the bladder does not furnish adequate drainage, in which case it is necessary to do regular suprapubic cystotomy, which can be done easily under local anesthesia. The whole secret of success in these difficult cases is to pick your time for prostatectomy when the danger of uremia has passed and when the patient's general health is definitely on the up grade as evidenced by rising specific gravity of the urine, improvement in functional test of kidneys and blood nitrogen approaching normal, increased appetite, gain in weight and generally improved well being and spirits. During this preparatory period, only a part of which need be spent in the hospital, daily irrigations of the bladder to control and clean up infection and the use of hexamethylene and dietetic and hygienic regime are essential to rapid and satisfactory improvement.

Up to recently, men suffering from prostatic hypertrophy have come to operation only in the stress of acute retention or after much and sometimes irreparable damage has been done, and when life has become well-nigh intolerable. They come to the surgeon as a last resort, preferring death, following the operation, to life with their infected obstructed genito-urinary tracts. That surgery has been able to bring relief to these well-nigh hopeless men and enable them to spend their declining years in peace and comfort should be a message of hope to cheer the hearts of all of us, for we may any of us in later years become victims of this serious ailment which, unlike the majority of genito-urinary diseases, does not spare the virtuous.

V. C. Hunt in 1920 in reporting 352 prostatectomies performed in the Mayo Clinic in 1918 and 1919 states that 265 or 84 per cent were one-stage operations; 169 of the patients were prepared on intermittent or permanent urethral catheterization; 87 of the patients, 25 per cent, were subjected to the two-stage operation for various causes. This means that men are asking for surgical advice much earlier than formerly at a time when permanent injury has not yet occurred. These patients will be saved years of pain, discomfort, incontinence, and semi-invalidism by having an early operation which can be done safely with a minimum of inconvenience and loss of time.

OPERATION. The operation is performed under local anesthesia, under gas and local, under spinal anesthesia, and under full ether narcosis. All of these methods except spinal anesthesia have been used and all with success, but owing to the fact that the kidneys usually are more or less damaged ether anesthesia should be avoided if possible. Until a safe method of spinal anesthesia has been brought out it would seem safest to do these cases under novocaine-gas anesthesia, shortening the time of the general anesthetic by not

starting it until the surgeon is ready to begin his enucleation. The final cleansing of the bladder, the making of the abdominal wound and opening of the bladder can all be done under local before the gas is given.

The ideal method after the prostate has been enucleated is to expose the base of the bladder with an automatic speculum, sponge out the clots and suture the bleeders in the torn edge of the bladder, anchor a catheter introduced through the penis with a side opening at the proper place to get good drainage, and close the bladder wound around this catheter which extends out of the suprapubic opening where it can be clamped or hooked up to a bottle for additional drainage. This tight "plumbing" has the advantage of a dry bed for the patient. The discomfort of the wet bed with free suprapubic drainage is hard for these old men to bear. It is not, however, always practical to do this and in many cases packing of the area of enucleation and a large suprapubic drainage tube are found necessary or expedient.

The after care of these patients is extremely important. Hexamethylene gr. 15 to 60 per day should be started. Plenty of fluids by mouth, by rectum or under the skin should be given. Gentle irrigation to remove the clots that stop the drainage for the first few days and until the packing suprapubic drainage tube is removed is better than more extensive irrigations. The bladder should be washed with boric once or twice daily during the healing of the wounds in the bladder to remove accumulations of pus. The patient should be gotten out of bed early, by the third day if possible. A back rest during the day is of advantage from the beginning. Adequate nursing care, preferably by a male nurse or trained nurse attendant, is indispensable to satisfactory convalescence. The average female special nurse hates these cases and rarely is able or willing to give them the care and attention that they need. We have been fortunate at the Muncie Home Hospital in having a young medical student as attendant who has rendered invaluable service in caring for these cases.

The points of emphasis in dealing with hypertrophy of the prostate are as follows:

1. The suprapubic route is the method of choice because of ease of access, thorough exploration of the bladder and freedom from damage to the external bladder sphincter and the rectum and consequent incontinence and urethro-rectal fistula.

2. The operation as outlined here is safe, having scarcely any mortality, and the relief of suffering and prolongation of life make it very much worth while.

3. Prostatectomy is never an emergency operation.

4. The greatest care must be exercised in emptying a distended bladder.

5. Every patient suffering from chronic or acute urinary obstruction is potentially if not actually uremic.

6. Preoperative drainage of the bladder by whatever method suited to the case is the most important thing in preparing the patient for a safe prostatectomy.

THE TREATMENT OF SYPHILIS

SUMMARY OF TREATMENT AS EMPLOYED IN THE
DEPARTMENT OF DERMATOLOGY AND SYPH-
ILIS AT THE COLLEGE OF PHYSICIANS
AND SURGEONS, NEW YORK CITY*

JOHN A. FORDYCE, M.D.
NEW YORK CITY

Every lesion on the genitals should be regarded with suspicion and examined for the treponema pallidum. The earlier treatment is begun the better the chance of preventing a general dissemination of the treponemata in the various organs of the body.

Abortive Syphilis: Abortive treatment means the treatment of a patient with a genital or extra-genital lesion in which the treponemata pallidæ have been demonstrated by the dark field before the Wassermann reaction has become positive. These patients are given eight intravenous injections of arsphenamine of 0.3 to 0.5 gm. each (dosage according to sex, weight, and age of patient). The first three injections are given every other day in vigorous individuals where the drug is well tolerated, and the remaining five every five to seven days. This treatment is rather intensive but is worth while to prevent general dissemination of the disease. As a measure of safety a second course of six injections of arsphenamine is given after an interval of four to six weeks.

Wassermann tests should be made at stated intervals to determine whether the disease has remained localized. In a few instances where the test was negative and the diagnosis of primary syphilis was based on a positive dark field, the Wassermann reaction was found on the second or third examination to be positive although the patients had been treated immediately as outlined.

Patients who have never developed positive serological findings may be considered abortive cases and should be under observation for at least one year after discontinuance of treatment for monthly blood tests. Where a positive Wassermann develops during treatment, the latter must be carried out the same as in early secondary cases. **Secondary Syphilis:**

A. Chancre with a positive Wassermann reaction only.

B. Chancre with skin and mucous membrane

manifestations, and a positive Wassermann reaction.

The treatment should be given in courses and must be carried out in a systematic manner. The patient should be instructed as to the importance of following this plan in order to obtain a cure.

Before the administration of arsphenamine it is usually advisable to give one or two injections of mercury to prevent a Herxheimer reaction.

First Course: Intensive Method: This is employed where rapid sterilization is desired when the patient is a menace to his family and the community because of mucous membrane, lip or other external lesions containing numerous treponemata.

The first three injections are given every other day, then every five or seven days until eight have been administered, dose 0.3, 0.5, 0.6 gms., according to sex, weight, age and physical condition of the patient.

Mercury should be given during this course. Fifteen intramuscular injections of the salicylate, grains i to iss every seven days, or if a soluble mercurial is employed, such as bichloridol, grains i every four or five days.

At the completion of the course a Wassermann test is made. Very often it is negative. Notwithstanding a negative result, the treatment is repeated after the patient has had a rest of four to six weeks.

Second Course. This consists of eight intravenous injections of arsphenamine, dose 0.3-0.5 gms., at weekly intervals and fifteen mercurial injections as in the first course. Four weeks after cessation of treatment the blood is examined. If it is positive the patient is instructed to rest four to six weeks longer before beginning a third course of eight arsphenamine and fifteen mercurial injections. Should the test be negative a rest of three months is advised, followed by a course of six arsphenamine and ten mercurial injections.

Under ordinary conditions the treatment as outlined above will reverse the positive serological findings and cure the patient, but complications may arise during the early period of syphilis, such as cerebro-spinal involvement, which change the situation and alter the prognosis in each individual case. Patients with involvement of the central nervous system require treatment over a longer period, and where the ordinary methods fail to bring about a negative spinal fluid, intraspinal injections should also be given.

Tertiary and Latent Syphilis: Patients in the tertiary or so-called latent stage are treated in practically the same manner as secondary syphilis, except, first, they are not treated so intensively, and secondly, iodides are used freely during the rest periods. It often takes years to obtain a negative Wassermann reaction in these cases and the total amount of treatment required is very much greater than in secondary syphilis.

*This is a paper issued by the United States Public Health Service for use in state health departments and is considered of sufficient importance to justify general distribution among medical men and therefore we are reproducing it.—EDITOR.

Obviously, therefore, treatment cannot be pushed with the idea of obtaining a negative result in a given time. Judgment must be displayed in arranging the intervals and amount of treatment to avoid arsenical poisoning.

Great care must be exercised in the treatment of patients with syphilis, and careful examination of the heart and aorta, lungs, kidneys, eyes and nervous system must be made to detect organic changes. Special emphasis should be laid on careful routine examination of the pupils as pupillary changes are often the only objective evidence of involvement of the central nervous system in patients with tertiary syphilis.

Patients with organic disease do not tolerate intensive treatment of any kind and syphilitic therapy must be administered with great caution.

Antenatal Syphilis: In the treatment of syphilis during pregnancy great care must be exercised in the administration of our specific drugs. The ideal place to treat pregnant syphilitic patients would be in the hospital where all precautions could be carried out carefully. If the patient is treated in the office or clinic and permitted to go home she should be instructed to lie down on reaching home and remain in the recumbent position for at least four to six hours. Every precaution should be taken to prevent a reaction, for severe vomiting may stimulate uterine contractions and result in miscarriage. Weekly examinations of the urine should be made to determine the kidney function.

The treatment is given in courses of six neoarsphenamine and ten bichloridol injections, using the continuous method, that is, first the neoarsphenamine and then the mercury; after four to six weeks' rest a repetition. In this way the patient is not overtaxed by the drugs. Two courses of each are usually sufficient during the period of gestation and result in the birth of a healthy baby.

Congenital Syphilis: The treatment of infants and young children consists of intramuscular injections of neoarsphenamine (neutral) and mercuric chloride (bichloridol).

Here again emphasis is laid on two factors, first, the earlier the treatment is begun the more rapid the serological cure, and secondly, treatment must be carried out in a routine manner in courses as follows:

AGE	DRUG AND DOSAGE	
	<i>Neoarsphenamine</i>	<i>Bichloridol</i>
3 wks. to 6 mos.....	0.1 gm.	gr. 1/10
6 mo. to 1 yr.....	0.15 gm.	gr. 1/8
1 yr. to 2 yrs.....	0.15 to 0.2 gm.	gr. 1/7
2 yrs. to 3 yrs.....	0.2 to 0.25 gm.	gr. 1/6
3 yrs. to 5 yrs.....	0.25 to 0.3 gm.	gr. 1/5—1/4

As in acquired syphilis the treatment must be individualized and the intervals lengthened or the dosage changed as indications arise.

The urine should be examined at frequent intervals, as occasionally a trace of albumin is

found. This quickly subsides when medication is discontinued.

A course consists of eight intramuscular injections of neoarsphenamine and ten to twelve intramuscular injections of bichloridol, not given together as in the case of adults, but one drug followed by the other. Two full courses, each with proper rest intervals regardless of a negative reaction, and possibly a third course of mercury, are usually given. In very feeble infants, and in the presence of active syphilitic manifestations, it is advisable to begin with mercury, giving at least four to eight injections before the administration of neoarsphenamine.

Special Remarks:

First—Before receiving arsphenamine patients should be instructed properly regarding a cathartic the night before treatment, abstinence from food before and after the injection, and rest.

Second—Careful examination must be made of the heart, lungs, kidney function, etc., to gauge the amount of treatment that may be tolerated with safety, and the possible toxic effects of the drugs.

Third—Careful routine eye examinations should be carried out early in the disease and repeated during the time of treatment.

Fourth—A lumbar puncture should be made to determine the presence or absence of cerebrospinal involvement.

Fifth—A patient should never be discharged as cured until the Wassermann test has been negative for at least two years after repeated testing. It is customary to give a provocative arsphenamine injection as a final measure. This consists of the ordinary intravenous injection of average dose with tests taken at intervals of twenty-four, forty-eight, seventy-two hours, one week and one month. If these are negative and the spinal fluid is negative the patient may be discharged as cured.

Sixth—A patient with positive findings in the cerebro-spinal fluid should not be discharged even if the blood is negative.

Seventh—Care must be exercised in the future treatment of patients who have complications following arsphenamine, such as cutaneous and nitritoid reactions and jaundice. In some a change in the preparation may be tolerated; in others the same reactions occur. We must, therefore, rely on mercury and iodides.

Contraindications to Arsphenamine Therapy:

1. Marked organic disease of the heart and aorta, kidneys and other viscera.

2. Degenerative changes of the blood vessels, arteriosclerosis, etc.

3. Extreme malnutrition and cachexia where other diseases are associated with the syphilitic infection.

4. Severe nitritoid reactions and cutaneous manifestations following the administration of the arsenicals.

5. Arsenical neuritis. While this condition is a rare one patients complaining of pain or dysesthesias in the extremities should be investigated for a possible neuritis.

6. Jaundice the result of an arsenical intoxication. Pains in the joints developing during treatment are suggestive of a beginning jaundice.

Jaundice Occurring as a Complication During the Treatment of Syphilis: This complication is probably due to the direct action of arsenic on the liver, causing acute inflammatory changes in the liver cells and biliary passages, resulting in a blocking of the free flow of bile into the intestines.

The treatment consists of discontinuance of all arsenicals, free and forced elimination through the kidneys and intestines, and a fat-free and low protein diet. Plenty of water, lemonade, sodium phosphate and cholagogue cathartics (such as Veracolate and Taurocol tablets with pancreatin and pepsin) should be taken.

It usually takes several weeks for the jaundice to develop, during which time the patient complains of digestive disturbances, lassitude and pains of varying grade in the joints and extremities. Patients with jaundice should not be given the arsenicals for at least six to nine months after the attack and then they should be administered very cautiously in small doses.

Indications for Intraspinal Treatment:

1. Rapidly advancing optic atrophy due to a basilar meningitis where intravenous medication has failed to control the progress of the disease. The indications for or against intraspinal treatment are determined by the spinal fluid formula.

2. Cerebro-spinal syphilis where thorough intravenous and intramuscular medication has failed to bring about the desired clinical and serological results.

3. Cerebro-spinal syphilis where patients do not tolerate arsphenamine intravenously.

(Cerebro-spinal syphilis includes syphilitic meningitis, meningo-encephalitis, meningo-myelitis, vasculitis, tabes, tabo-paresis and paresis.)

Method Employed for Intraspinal Treatment: The patient receives his regular intravenous treatment; thirty minutes later 50 c.c. of blood are withdrawn in a sterile tube and placed on ice until the following day, when he is to be treated. The blood is centrifugalized, the serum pipetted into a sterile tube, centrifugalized again to make certain that all the red cells have been thrown down, and pipetted into another sterile tube. The serum is then placed in an incubator at 56 degrees C. for forty minutes, after which it is ready for use.

The patient should be kept in bed at least twenty-four hours after each intraspinal treatment, instructed to lie flat without a pillow, drink water freely, and not leave his bed for any reason until the next day.

Intraspinal injections are given every two to four weeks, depending upon the reaction of the patient, for six to eight treatments. A rest period of two to three months follows and then a similar course is given. The spinal fluid should be examined after each treatment.

The serological improvement is determined by the decrease in the lymphocytes, globulin, Wassermann reaction, and the character of the Gold Sol reaction.

CLINICAL EXPERIENCE WITH KOLMER COMPLEMENT FIXATION TEST FOR SYPHILIS

The Kolmer complement fixation test Jay Frank Schamberg and S. S. Greenbaum, Philadelphia (*Journal A. M. A.*, March 24, 1923), state is distinctly more sensitive than the routine three antigen method. With its employment, the serums of syphilitic subjects are slower in becoming negative, thus insuring more adequate treatment. The test detects relapsing positives at an earlier period than the older method. The quantitative character of the test enables the physician to determine more accurately the serologic status of the patient, and to gage the influence of treatment. The authors have never observed a false positive reaction by the Kolmer test. They regard the Kolmer test as an invaluable advance in the serologic study of syphilis.

Musculo Spiro palsy from excessive golf playing is reported by Wholey in the *Journal of the American Medical Association*, December 9, 1922.

SOME ORIGINAL BLOOD PRESSURE OBSERVATIONS

Nearly four years ago, Virgil C. Kinney, Wellsville, N. Y. (*Journal A. M. A.*, June 16, 1923), noted "a complete reversal of the normal blood pressure reaction". In a large proportion of both the high and the low blood pressure cases, the blood pressure is higher in the patient lying supine than when the patient is standing. In a large majority of patients with heart and kidney disease who cannot breathe well lying supine, this phenomenon occurs. This reversal pressure is also to be found in low blood pressure cases. Kinney believes that the reversal reaction is due to a general lowering of the systolic pressure, the pulse pressure, a lessened cardiac load and a lowered cardiac response. Probably, the arterial, venous and capillary systems all undergo a simultaneous dilatation; and this, with a weakened myocardium would seem to explain the reversal phenomenon. Kinney also believes that some standardized system of taking blood pressure is needed, and that much more work remains to be done before blood pressure reactions can be interpreted in their truest sense.

**THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION**

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.
Editor and Manager

Office of Publication, 406 W. Berry St., Ft. Wayne, Ind.

JULY 15, 1923

EDITORIALS

TONSILLECTOMY RESULTS.

In the *Journal of the American Medical Association*, May 26, 1923, Alvarez discusses the question of tonsillectomies in adult life and the lessons to be learned therefrom. His conclusions are based on observations in more than three hundred cases. Out of the total number, thirty-two percent. were very glad that they had had their tonsils removed, and they gave as a reason that they had gotten rid of repeated attacks of tonsillitis. Twenty-seven percent. of the cases reported that they had had some benefit, and that they had less tonsillitis and sore throat. Some had lost the troubles from which they had sought relief while others had gained markedly in weight and general health. The most striking fact which came out of the study is that those who had had much tonsillitis practically always were improved greatly while those who had no tonsillitis or sore throat rarely were pleased with their results. Poor results were obtained in all those cases in which an operation was performed simply because something could be squeezed out of the tonsils, or because the tonsils looked infected. The results of removal for rheumatism were poor, only seven out of forty-seven reporting a cure, and five others reporting improvement.

An interesting feature developed by the study is the fact that many of the patients were operated in the forlorn hope that the operation would prove valuable in relieving or curing certain conditions that produced ill health or discomfort, and it is a sad commentary on the diagnostic skill of some members of the medical profession when removal of tonsils is recommended for almost every ailment to which flesh is heir.

During the investigation it was discovered that many tonsillectomies were done badly, and that mutilated and deformed throats were not uncommon. It also was discovered that quite frequently a doctor recommended removal of tonsils in a patient who already had had a very successful tonsillectomy. In one amusing instance the man consulted his physician about rheumatism, and the following dialogue took place:

"Your tonsils must come out."

"But, doctor, they are already out."

"I don't care, it was a rotten job."

"But, doctor, you did it!"

Investigation disclosed the further fact that tonsils were removed for the most trivial reasons, and that not only were physicians guilty of this practice but patients themselves often insisted upon removal of tonsils for minor or even imaginary ills. That the operation is not always without unfavorable results is shown by the fact that eight percent. of the patients were worse or even suffered greatly subsequent to the operation.

In summarizing the paper the author says that it appears that it is not so much what the adult tonsil looks like but what it does that counts, and that removal of it should be undertaken with hesitation unless it is inflamed enough to cause sore throat and tonsillitis. Occasionally the chances are against the patient's being much benefited by its removal. Furthermore, if a patient suffers from repeated attacks of tonsillitis he almost always will be grateful for the operation, even though he fails to get relief from some other trouble. Tonsillectomies should not be done for relief of causes outside the throat unless the patient has been studied very carefully by some competent and well trained internist. Few promises should be made if some chronic disease is found elsewhere in the body. Conservatism should be the rule except in cases in which the patient is seriously menaced, or in which there are good reasons for believing that the disease is one that can be influenced by the removal of focal infections. Undoubtedly if care and judgment are used in the selection of cases the percentage of successes will be greater. Likewise bad results will be less frequent if the operation is done by those who are competent to do it in the way in which it should be done. There is no excuse for mutilated and deformed throats, nor is there any excuse for leaving remnants of tonsils.

The operation of tonsillectomy has a distinct field of usefulness in selected cases. It is an operation that should not be performed regardless of conditions, nor should it be performed by those who are not well trained for that particular work.

SOCIALIZING MEDICINE

ABOUT a year ago we called attention to the effort on the part of the University of Michigan to socialize medicine. Subsequently the medical profession of Michigan took occasion to question the propriety of putting into operation some of the socialistic schemes proposed and concerning which we had offered adverse comments, with the result that the medical leaders in the University disclaimed any intention of adopting any plans that could in any way be considered as socialistic or communistic in character. However, they never have explained away the plan for creating community clinics in the various populous sections of Michigan, such clinics to be under the

supervision of the University, (state controlled), nor have they been able to explain the reasons for requesting the building of an enormous hospital in the small city of Ann Arbor, the home of the University, with facilities for caring for probably twenty times more patients than can be used for purely teaching purposes. Before the medical profession of Michigan really was awake to the dangers that threatened, a large appropriation was secured and the hospital was started. The hospital never has been completed, for in addition to the very large amount of money that already has been put into it a still larger sum is required to complete it, and today the large and incomplete buildings stand as an expensive monument to the effort on the part of the medical department of the University of Michigan to create a feature that undoubtedly eventually must become a feature of so-called state medicine.

Our reason for again calling attention to this matter is that these efforts to put states, municipalities and even the federal government under control of communistic medicine and into actual competition in the private practice of medicine, are having a steady growth, and are developing so insidiously that the iniquitous results are secured before the medical profession really realizes what has occurred. For instance, when the hospitals of Ann Arbor, with their enormous capacity and unrivalled facilities, are completed and maintained at state expense, essentially free to all who may seek admission, can any one doubt that the state of Michigan has adopted socialistic medicine? Every doctor in Michigan will feel the effects of this competition, and the only ones outside of the patrons of the hospital to profit will be those who hold teaching positions at the University. Furthermore, how long will it be before even the enormous hospital facilities of the little city of Ann Arbor will be taxed to overflowing and the University authorities will ask for still **further** hospital accommodations to meet the growing demand; and, looking a little further into the future, is it not entirely within the range of possibility that the University authorities will consider it advisable to make it easier for the people of Michigan to secure hospital facilities by bringing the hospitals to their own doors? This could be arranged by erecting more hospitals in various populous centers of the state, always at state expense, and putting them in charge of those connected with the University. We haven't any doubt but that such a vision is in the minds of some of the authorities of the University of Michigan, though at the present time, due to adverse criticism of the medical profession of Michigan, they are having less to say upon the subject than they did a year or so ago.

Perhaps it would be well for us to have in mind what has occurred in Michigan and what very probably will be developed still further in that state, for here in Indiana also there is a possi-

bility of a similar condition of affairs prevailing. We already have the Long Memorial Hospital, and in process of construction the Riley Memorial Hospital, both in control of the State University and open to the people of the state under conditions that really constitute practically free service to any and all who apply. It is quite true that at present an attempt is made to conduct the Long Hospital in an eminently fair way, even though any number of complaints from medical men of Indiana are made concerning lack of discrimination regarding free service, to say nothing of the charge of exhibition of favoritism in the enrollment of patients. Likewise it is announced that the utmost care will be exercised in the management of the new Riley Memorial Hospital with a view to making it a hospital for the indigent only, but it is a safe bet that neither of these hospitals long will continue as hospitals for the indigent and as teaching hospitals. Long Hospital has been filled to capacity for months, and there is a long waiting list of applicants for admission. It will require but a few months to produce the same condition of affairs for the Riley Memorial Hospital. How long will it be before there is a cry for more and larger hospitals, built and maintained at state expense and the medical and surgical services of which will be gratuitous to any and all who apply? Even now many of the sponsors for the Riley Memorial Hospital in their efforts to raise money for the enterprise are making the statement that the medical and surgical services of the hospital are to be available to all without money and without price. It is but a step further to the adoption of plans such as seem to be maturing in Michigan. It is a Utopian dream for many. It sounds well and in the beginning it looks well, but the ultimate outcome is fraught with danger to the public, for it means socializing medicine, and that condition of affairs never has and never will be a success. The fact that the private practitioner of medicine eventually will be wiped off the earth if this plan is carried to complete fruition is a mere side issue, though not without merit in the discussion.

Health may be an asset of the state that should be protected by the state, but why is it necessary to furnish free medical and surgical services to protect health any more than to furnish free food, clothes, or good plumbing, for they likewise contribute to good health. Is there any reason why any honest and useful vocation should be legislated out of business or put entirely under the control of municipal, state or federal government? Isn't it about time that we analyze this question of socializing medicine and decide in a definite manner whether we desire to give it encouragement and assistance or not? Let us get away from the discussion of pure sentiment and discuss facts in their relation to the body politic, and incidentally the subject is worth considering by every doctor who depends upon his vocation for

a living and is not particularly keen to be numbered among an army of municipal, state, or federal office holders, with a bureaucratic position that to say the least is always insecure and dependent upon the vagaries of politics or other circumstances.

MEDICAL TESTIMONY IN COURT

WHEN an educated, well trained and experienced physician reads the evidence presented in court trials by some so-called medical expert witness, the conclusion is that the witness is either an ignoramus or a knave, more probably the latter. It probably is true, as has been stated by lawyers on more than one occasion, that one can secure expert medical testimony in support of any contention providing an appropriate fee is offered. We have known of instances where doctors have testified in a manner that indicated to his conferees that he was testifying for the fee and was willing to stretch his conscience or even to perjure himself in giving evidence that he certainly knew was contrary to teaching, experience, and even recognized facts. What a disgrace it is to the medical profession to have the reputation of being willing to sell medical testimony for a price.

The more we see and hear of medical expert testimony, the more we are inclined to the belief, expressed in this JOURNAL more than once, that medical and surgical experts should be appointed or selected by the court, the fee provided for by the court, and the witnesses informed that no matter what the testimony is, the fee will not be contingent upon the character of the testimony. In no other way will it be possible at all times to secure competent and unprejudiced testimony. On the other hand, we are convinced that the medical profession does not discipline its members enough. Whenever we find a doctor who is willing to sacrifice his reputation for competency and even honesty for the sake of a few paltry dollars, it is time to let him know that he and his practices are objectionable to reputable medical men. Men may have differences of opinion, but there is no occasion for a disagreement as to established facts, nor is there occasion for a misinterpretation of facts when it is very evident that such misinterpretation is with the avowed purpose of profiting. No physician should undertake to be a witness unless satisfied with the merits of the case and is thoroughly familiar with all of the facts relative to which he will be called upon to testify. Finally, his testimony should at all times be based upon the highest sense of honor and be devoid of the slightest tinge of unfairness.

FOR THE PEOPLE—NOT FOR THE DOCTORS

FOR years, in all the states, physicians have attempted to secure legislation to insure that all who practice the healing art shall be required to

show themselves prepared. There has been a constant tendency on the part of the legislators and laymen to question the motives of physicians, in spite of their insistence that the protection of the public has been the thing uppermost in their minds in seeking the enactment of laws to govern medical licensure. It is gratifying, therefore, when a great newspaper comes out in an editorial such as the one subjoined, from the *Chicago Tribune*.

Safeguard Health From Ignorance.

Physicians and laymen alike can hardly fail to take a personal interest in legislation for regulation of the treatment of the sick which is now under consideration in Springfield. At present there are some 12,000 persons in Illinois engaged in such practice. The only regulation governing them is that provided by a law now twenty-five years old. A modern bill, generally indorsed by reputable physicians, and passed five or six years ago, was declared unconstitutional because of some minor details.

The effect of this situation is a menace to the health of thousands of persons in the state who might put themselves in the care of inefficient practitioners. The purpose of law on the subject is to make careful and extensive scientific education a requisite to any treatment of the sick. That certainly is wise, and equally fair to those who wish to treat the sick and to those who seek treatment.

The Tribune does not presume to judge the merits of the bill introduced by Senator Mason, but we assume that he has had sound scientific advice in its preparation. There can be no doubt that some such legislation is needed. Human health is too precious to allow it to be imperiled by practitioners who acquire their "profession" with less study, less brains, and less effort than is required for the making of a good plumber.

Most potential patients have little or no knowledge of their own anatomy or what may ail it. Many have even less knowledge of the qualifications of those to whom they go for treatment; they must, of necessity, surrender themselves almost blindly into the hands of the physician. It is right that they should be protected insofar as possible from fakes, fads, and ignorance. A law which will do this, and raise and maintain the highest possible standards of the art or science of healing, certainly is needed. If Senator Mason's proposals will do this they should be supported, regardless of how much they may interfere with the activities of persons who look upon healing as a trade such as might be learned in night school.—*Bulletin of the American Medical Association, June, 1923.*

THE MEDICAL SOCIETY AND THE RIGHTS OF THE COMMUNITY

In a certain county medical society, whose meetings are held weekly in a city of 70,000, a member

was brought before the board of censors to answer very serious charges preferred against him. The censors, after investigation, reported their findings to the society and recommended that the accused member be expelled. A two-thirds vote was required for expulsion, but was not secured. Slightly more than one-third of the members present at the meeting at which the vote was taken voted against expulsion. So the society found itself in the position of having a member who had been found guilty of a serious offense by its board of censors, and whose expulsion was favored by almost two-thirds of its members. The matter was carried to the council of the state association, who instructed the county medical society to expell the member found guilty by its board of censors, or to suffer the loss of its charter.

There has been considerable publicity concerning the situation, newspapers having carried statements from both sides. Finally, the editorial reproduced below appeared in a local newspaper. It is interesting in more ways than one, but especially because of the point made that the public has certain rights which should be considered by a medical society, even in its own government.

"The public has a right to protest against the division that is about to disrupt the county medical society. No other profession occupies the close, intimate and vital relationship to a community that members of its medical faculty occupy; and the community has a right to expect that the responsible members of that profession shall keep it clean of pretenders, incompetents and quacks. Realizing that right in the public, physicians have universally organized themselves into associations under a fixed code of rules and regulations for the control of practice and the protection of each other as well as of their patrons. There are many of the so-called ethical rules set up by the profession that do not appeal to the general public, but none can say that these rules are not essential to the proper functioning of the organization. Restraints upon men in so serious a profession can hardly be too strict, even though there might come occasions when exceptions might be taken to their rigidity.

"In the case in point here, the lay citizens would not, of course, be suspected of forming any judgment except that as in cases of differences it is an American privilege, if not a right, to sustain the majority. The medical faculty has its rules for the guidance of its practitioners, and we should say that every member of the organization is bound by this moral obligation to observe those rules and ethical standards; further, that if the time should come when any one or more members cannot do that, it is for him or them to get out and leave the majority to conduct the affairs of the organization as they may agree.

"It is, therefore, disquieting when so conservative and so highly privileged a body of men as

the doctors of a community cannot enforce the regime they themselves prescribe, to which every practitioner does or should subscribe.

"In this emergency it is, perhaps, due the public that the state medical association institute an impartial inquiry in the issues involved, pronounce a fair verdict and set the seal of regularity on that faction offering most to the public weal and their due care of the public health."—*Bulletin of the American Medical Association, June, 1923.*

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

THERE is an opening for a general physician in the town of Fillmore, Putnam County. It is an ideal village of three hundred inhabitants in a thickly populated rural district. There is only one physician located there at the present time and he desires to retire from general practice. Information may be obtained by writing J. H. Crouch, M. D., Fillmore, Indiana.

ACCORDING to B. J. Palmer, the high priest of chiropractic, lice are a manifestation of a disturbance in the vertebral column and pressure upon some of the vertebrae. According to his testimony, delivered in court, for lice on the head he would adjust the vertebra in the cervical region. For lice in the groin he would adjust the vertebra in the lumbar region. As the *Journal of the A. M. A.* well says, "comment on this would be painting the lily and gilding refined gold."

THIS is the time of year when doctors should advise their patients concerning the dangers encountered in a summer vacation unless due precautions are observed. One of the principal things to be considered is the water supply. It is not safe to drink from a spring or well unless it is positively known that the water supply is uncontaminated, and one is never quite sure of that. The safest procedure is to boil the water. On the other hand, doctors should not forget the prophylactic value of typhoid vaccination.

DR. JOSEPH RILUS EASTMAN, of Indianapolis, says: "For twenty-five years I have seen good

people dying like rotten sheep all around me because of the administration of salts and oils in acute appendicitis. The following item in large type should appear in medical journals constantly attracting doctors' attention in order to save many lives." The idea which he desires given publicity in the medical press is as follows: "For pity's sake, quit giving physic in acute appendicitis. It perforates and kills.—Joseph Rilus Eastman, M. D."

THE anti-vivisectionists and the anti-vaccinationists are getting active in Indiana. The worst feature about their propaganda is that for the most part it is made up of not only distortion of facts but deliberate falsehoods as well. However, this propaganda must be met, and we suggest that our educational committee of the association counteract some of this vicious propaganda by a plain statement of facts concerning the subjects under consideration. We do not believe in any campaign of abuse, but we do believe in calling a lie a lie, and exposing the liar. Some people are never good until they are forced to be good.

Now that we have efficient and trustworthy substitutes for cocaine, an effort is being put forth to abolish cocaine, but of course this only can be done by preventing its manufacture and prohibiting its cultivation. It is a well known fact that by far the greatest part of the cocaine manufactured is illicitly sold and misused, and it has been demonstrated that repressive or restrictive legislation is of little or no use. Whether the effort to prevent the cultivation of the drug will succeed, is open to serious doubt. However, cocaine is no longer needed in medicine, surgery or dentistry, and therefore there is no serious excuse for its manufacture.

THIS JOURNAL makes every effort to exclude unworthy advertisements in order to protect its readers. THE JOURNAL could be filled with advertisements of the Nostrum class and it would prosper financially; but, since it is published primarily for the benefit of its readers and not for profit, all advertisements known to be dishonest or even questionable are excluded.

Since this policy of discrimination protects you, it should be a privilege to patronize the advertisers in your own JOURNAL. Don't experiment! Buy trustworthy goods from reliable houses.

You may depend on the advertisements printed in this JOURNAL.

ALL the states are wrestling with the question of whether or not to license chiropractors. Maine put a few teeth in the law recognizing chiropractors by providing that chiropractors are not permitted to use the prefix "Dr.," or the word "doc-

tor," or to use drugs, to do surgical operations, or to practice obstetrics. It strikes us that this is the most sensible way of handling the chiropractic situation. Eventually the public will know how dangerous the chiropractors are and how illy qualified they are to treat disease of any character, but a law such as Maine has just passed should satisfy every one and offer the recognition the chiropractors desire.

A REPRESENTATIVE of the American College of Surgeons has been making an inspection of hospitals in Indiana. He reports that there has been considerable improvement, but there is room for more improvement, and incidentally a great deal of improvement in some hospitals. The principal complaint is with reference to the failure on the part of so many hospitals to provide adequate laboratory facilities, and on the part of members of the staff to make complete records of cases, including history, physical examination, laboratory findings, and results of an autopsy if same is held. If the standardization of hospitals is to amount to anything, the requirements of the American Hospital Association must be carried out, and it is hoped that Indiana will be in the front rank of the states that carry out all of the requirements of standardization.

INDIANA people are now paying a two-cent tax on every gallon of gasoline used. Probably doctors are hit as hard as any one else, but they will not complain if what they pay as a gasoline tax is spent on the roads as promised. Judging from the amount of automobile traffic in Indiana, the highway commission ought to have enough money in the course of a year or so to pave all the roads in Indiana and tie red ribbons and bouquets on every signpost, but the chances are that there will be a certain amount of juggling of the funds, and probably not all the money that is raised through the tax will go into road construction. Anyway, let us hope that as a direct result of the increased tax we are paying that we will get better roads. There certainly is room for much improvement on some of the trunk line roads that have been pounded to pieces by constant use, and especially the heavy trucks that ruin anything but a road built according to the most approved construction.

THE merry war in the Presbyterian church concerning the conflict between religion and evolution goes on. Bryan is a good fighter and if he had his way he would drive every one out of the church who believes in evolution, but Bryan has not always been right, as history shows, and though he is a sincere and earnest thinker yet there are several million people who believe that he is inconsistent and irrational in some of his ideas. In his religious fight he is opposed by some

of the best theologians who do not believe that religion suffers with the acceptance of the evolutionary theory.

In this connection it might be well to add that there are a great many scientists and professional men who believe in evolution and yet believe in the Bible and the Christian religion. It seems a pity that there should be occasion for any such religious squabble as is being engaged in at the present time by Bryan on one side and some of the leading Presbyterian ministers on the other side, for such controversies do not help the cause of religion, and make many of those who are on the outside less inclined to take up with it. Just why a belief in evolution should bar a man from communion in any church is hard for many of us to understand.

Now that the medical journals and even the newspapers have had so much to say concerning the use of insulin in the treatment of diabetes, there is a demand for the new preparation that far exceeds the supply. Not only do many doctors, but many lay persons as well, have an idea that insulin will cure diabetes when, as a matter of fact, the new preparation will do nothing of the kind. What insulin really does is help to take care of the acid and sugar content. It should be remembered that successful treatment of diabetes with insulin, as Joslin, in the *Journal of the American Medical Association*, of June 2, 1923, says, depends upon the utilization of all those measures that have proved of the greatest value in the treatment of diabetes without insulin, and these are, adherence to a diet which will keep the urine sugar free, avoidance of overnutrition or extreme under nutrition, and a method of life compatible with the strength such a diet affords. Insulin does not cure diabetes, nor does it allow a diabetic to eat anything he desires. It is unfortunate that some physicians are arousing such false hopes. Intelligent patients can be taught the use of the diet and insulin in a week, and in two weeks the average patient can become free of acid and sugar, learn what is requisite either in hospital or in boarding house, or with a diabetically trained nurse in his own home.

ACCORDING to a newspaper account, eight physicians were arraigned before a federal judge in Illinois for violations of the Volstead Act. It seems that all pleaded guilty of the charges preferred against them, whereupon the judge of the court, in assessing fines of \$500 and costs, delivered the following statement:

If there is any class of citizens in this country, who, more than any other class of citizens, ought to have respect for the Volstead Act, it is the physician. The state laws which license you to practice your profession repose special confidence in your ability and character. They didn't license you to be bootleggers. The Congress of the United States when it gave you special privileges under this act didn't deem that they were licensing you

to be bootleggers. But you have all pleaded guilty to being bootleggers to the extent that you have actively betrayed the trust which the government has placed in you, to help bootleggers to make a defense, as they see it, from criminal prosecution.

Undoubtedly more is expected of physicians than of any other group. They have more responsibilities and obligations, some of which belong to them by reason of the very fact that they are physicians; while some others have been imposed on them by laws and otherwise, without much regard for their feeling or wishes and, perhaps, without due consideration of the questions involved. For the most part, the medical profession has lived up to its duty well and has discharged well most of its obligations whether those which naturally devolve on physicians or those imposed on them. The pity is that, when those not truly representative of the profession violate the law or are guilty of other reprehensible practice, the whole profession is made to suffer. Even federal judges are sometimes too general in their remarks and fail to give due credit to the great mass of physicians in this country who not only observe the law, but have also, against their own wishes, been made instruments in the hands of the government and courts for enforcing laws.—*The Bulletin of the American Medical Association*, June, 1923.

A GREAT many letters are received by the American Medical Association asking whether or not it is permissible, under the provisions of the Principles of Medical Ethics, to send out announcements of change of location, association of physicians in practice, change in kind of practice, etc., etc. In many instances these letters contain numerous inquiries about what might be considered advertising and as to just how far a physician can go and yet escape accusation. The Principles of Medical Ethics leaves much to "personal taste or local custom" hence it is best for any who have any question as to what may be permitted in any community to seek advice from the constitutional authority of the county medical society. Section 4, Chapter II of the Principles of Medical Ethics is as follows:

ADVERTISING

Section 4. Solicitation of patients by physicians as individuals, or collectively in groups by whatsoever name these be called, or by institutions or organizations, whether by circulars or advertisements, or by personal communications, is unprofessional. This does not prohibit ethical institutions from a legitimate advertisement of location, physical surroundings and special class—if any—of patients accommodated. It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well merited reputation for professional ability and

fidelity. This can not be forced, but must be the outcome of character and conduct. The publication or circulation of ordinary simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not *per se* improper. As implied, it is unprofessional to disregard local customs and offend recognized ideals in publishing or circulating such cards.

It is unprofessional to promise radical cures; to boast of cures and secret methods of treatment or remedies; to exhibit certificates of skill or of success in the treatment of diseases; or to employ any methods to gain the attention of the public for the purpose of obtaining patients.

A little more general knowledge of the various provisions of the Principles of Medical Ethics as they apply to many minor questions would seem to be needed. It would not come amiss to have the booklet put into the hands of every member of every county medical society and then to have it read at one meeting during each year. The profession generally is familiar with the major provisions; to know just what is said relative to minor matters is quite worth while.—*Bulletin of the American Medical Association, June, 1923.*

DEATHS

CHARLES E. DIVEN, M. D., died June 11, at his home in Anderson. Dr. Diven was seventy-two years of age. He graduated from the Miami Medical College, Cincinnati, in 1874.

FREDERICK W. SCHELLHASE, M. D., of Evansville, died June 1. Dr. Schellhase was eighty-one years of age. He was a graduate of the Homeopathic Medical College of Missouri, St. Louis, in 1841.

G. A. WILLEFORD, M. D., of Indianapolis, died June 3, at the age of forty-three years. Dr. Willeford graduated from the Indiana Medical College, School of Medicine of Purdue University, Indianapolis, in 1907.

WILLIAM B. KITCHEN, M. D., died at his home in Indianapolis, June 20, at the age of fifty years, as the result of a stroke of apoplexy. Dr. Kitchen graduated from the Medical College of Indiana, Indianapolis, in 1903. He was a member of the Marion County Medical Society, the Indiana State Medical Association and was a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE governor of Maine has vetoed the Shepard-Towner bill that was passed by the Maine legislature. The New York legislature has again declined to pass the bill.

DR. WILLIAM J. MAYO, of Rochester, Minn, has received the honorary degree of Doctor of Laws from McGill University.

DR. J. V. CASSADY has announced the removal of his office from 767 Oliver Building to 613 J. M. S. Building, South Bend, Indiana.

THE twenty-second annual conference of sanitary officers and public health nurses of New York state was held at Saratoga Springs, N. Y., June 26th, 27th and 28th.

THE Muncie Academy of Medicine held a meeting at Muncie, June 8. Dr. Ed Davis, of Albany, presented a paper on "The Medical Treatment of Infections of the Biliary Tract."

THE LaPorte County Medical Society held a meeting at the Rumley Hotel, LaPorte, June 14. A paper on "The Use of Insulin" was presented by Dr. Solomon Strouse, of Chicago.

DR. A. A. WILLIAMSON, of Lebanon, has leased office rooms in Frankfort and expects to be located there about July 15. Dr. Williamson is a specialist in the practice of eye, ear, nose and throat diseases.

THE Muncie Academy of Medicine held a meeting June 22 at the Hotel Roberts, Muncie. A paper on "Nephritis" was presented by Dr. L. M. Warfield, professor of medicine at Michigan University.

SECRETARY OF THE INTERIOR WORK recently presented diplomas to forty physicians, students of the United States Veterans' Bureau school of neuro-psychiatry at St. Elizabeth's Hospital, Washington.

THE new Clinton County Hospital at Frankfort was opened June 10 for inspection by the people of Clinton County. The hospital will accommodate sixty-eight patients and is modern in every particular.

THE doctors, dentists and druggists of Sullivan county, with their wives, were entertained at the home of Dr. and Mrs. Stanley Brown, of Carlisle, June 5. Dr. Kite who is associated with Eli Lilly & Co. delivered an address.

THE American Academy of Ophthalmology and Otolaryngology will hold its twenty-eighth annual meeting in Washington, D. C., October 16th to 18th. Sir William Lister, of London, will be the guest of honor of the meeting.

MISS EDITH MAYO, daughter of Dr. Charles H. Mayo, was married June 13 to Dr. Frederic W. Rankin, professor of surgery at the University

of Louisville, Kentucky. Dr. Rankin formerly was a member of the staff of the Mayo Clinic.

THE annual assembly of the Tri-State District Medical Association, of Iowa, Illinois, Wisconsin and Minnesota and districts of surrounding states, will be held at Des Moines, Iowa, on October 29th, 30th, 31st, and November 1st, 1923.

IN New York all operators of x-ray machines must first obtain a permit from the Health Department. The registration of physicians and dentists does not carry with it the right to operate x-ray machines without a permit, in New York City.

JOHN H. MUELLER, Ph. D., associate professor at Columbia University, has been appointed assistant professor of bacteriology at the Harvard University Medical School. Dr. Hilding Berglund has been appointed assistant professor of medicine.

WELL chosen music will now form part of the treatment of patients in the New York Nursery and Child's Hospital. Following a sixty-day test with phonograph in that institution, it was demonstrated that the waltz is good medicine and soothing.

THE Northeastern Indiana Academy of Medicine held a meeting at Angola, June 28. Papers were presented by Dr. Charles E. Boys, of Kalamazoo, Michigan, on "Goitre" and by Dr. John B. Jackson, of Kalamazoo, Michigan, on "Basal Metabolism."

The legislature of Iowa has passed a bill appropriating \$450,000 a year for five years, for the Iowa State University medical school and hospital, thus assuring the generous gift offered by the Rockefeller Foundation and the Board of Education, \$4,500,000.

ARRANGEMENTS have been made whereby the Pennsylvania State Medical Journal and the Delaware State Medical Journal will unite in one Journal under the name of the Atlantic Medical Journal. This new journal will serve as the official organ of these two State societies.

DR. C. A. ROBISON, of Frankfort, has purchased the office and equipment of the late Dr. J. W. Hadley, of Frankfort. Upon the completion of a post-graduate course in eye, ear, nose and throat, in Chicago, Dr. Robison will resume the practice of Dr. Hadley and relinquish his present general medical practice.

THE Posey County Medical Society held a meeting at New Harmony, June 12. Election of officers was held, and Dr. J. E. Gudgel of Cynth-

iana, was re-elected president; Dr. J. R. Ranes, of Mt. Vernon was re-elected secretary-treasurer; and Dr. Tom Wilson, of New Harmony, was elected vice president.

AT the annual meeting of the American Urological Society held on May 21 at Rochester, Minn., the following officers were elected for 1923-1924: President, Dr. James A. Gardner, of Buffalo; vice-president, Dr. Herman L. Kreschmer, of Chicago; treasurer, Dr. James B. Cross, of Buffalo, and secretary, Dr. Homer G. Hamer, of Indianapolis.

THE American Laryngological, Rhinological, and Otological Society has elected the following officers: President, Dr. H. W. Loeb, St. Louis, Mo.; vice-president, Dr. F. N. Sperry, New Haven, Conn.; treasurer, Dr. E. W. Day, Pittsburgh, Pa.; secretary, G. L. Richards, Fall River, Mass. The next annual meeting of the society will be held in St. Louis, Missouri, early in May, 1924.

AN osteopath, practicing in Twin Falls County, Idaho, was convicted of practicing surgery without a license, following the performance of appendectomy, after prosecution in the superior court. An appeal to the state supreme court resulted in confirmation of this verdict. The decision states that the holder of a license to practice osteopathy in Idaho is not authorized to practice medicine and surgery.

THE American Society for the Control of Cancer held several meetings at the San Francisco session of the American Medical Association. On June 28 a dinner conference was held at the Fairmount Hotel. In June 24 a public cancer meeting was held in the auditorium under the joint auspices of the American Medical Association, the California State Medical Society and the American Society for the Control of Cancer. Dr. de Schweinitz presided at this meeting.

THE June issue of American Medicine is devoted to the problem of high blood pressure and contains many very excellent articles on this subject, from the pens of some of the best authorities in this country and England. The editors say that, without intending to be bombastic or extravagant in their claims for this issue, they believe that the list of articles which appear in the June number of American Medicine justifies them in asserting that it is the most noteworthy and authoritative consideration of the subject thus far published.

THE U. S. Public Health Service says that leprosy is in a measure amenable to treatment. During the last ten years (1912-21) a considerable percentage of the lepers segregated at the

Kalihi Hospital near Honolulu has been paroled; that is, they have been released as being "not a menace to the public health," but have been required to report for examination at certain intervals which vary with the individual case. Of those paroled about thirteen per cent, have relapsed and have returned to segregation; but about one-fourth of these were later paroled for the second time. In all, 242 lepers were paroled; thirty-one relapsed and seven of these later paroled. Ten were completely released from parole.

THROUGH investigations conducted by Government technologists, methods of detecting carbon monoxide—most insidious and deadly of poisonous gases—have been greatly simplified. For some time the Bureau of Mines of the Interior Department has been conducting research work with the result that means have been found by which it is possible to discover within three minutes the extent that a person has been affected by carbon monoxide gas through the extent of poison saturated in the blood. Formerly it took approximately from twenty-four to forty-eight hours before diagnosis could be made of such cases either in hospitals or well-equipped laboratories with the services of a skilled organic chemist. The test is effected through a simple and inexpensive instrument which may be carried in the pocket and which requires no special training for its operation.

In addition to the articles enumerated in our letter of May 29th, the following articles have been accepted:

Abbott Laboratories
 Amidopyrine-Abbott
 Amidopyrine-Abbott Tablets, 5 Grains
 Epinephrin Chloride Solution-Abbott
 General Chemical Co.
 Sofos
 Eli Lilly & Co.
 Iletin (Insulin-Lilly)
 Iletin (Insulin-Lilly) H-10:5 Cc. Ampules
 Iletin (Insulin-Lilly) H-20:5 Cc. Ampules
 Powers-Weightman-Rosengarten Co.
 Sulpharsphenamine Billon
 Sulpharsphenamine Billon, 0.1 Gm. Ampules
 Sulpharsphenamine Billon, 0.2 Gm. Ampules
 Sulpharsphenamine Billon, 0.3 Gm. Ampules
 Sulpharsphenamine Billon, 0.4 Gm. Ampules
 Sulpharsphenamine Billon, 0.5 Gm. Ampules
 Sulpharsphenamine Billon, 0.6 Gm. Ampules

SOCIETY PROCEEDINGS

"LET'S GO—3000 MEMBERS FOR 1923"

To realize this, our President's slogan for this year, it will be necessary for every county society to increase its membership over that of 1922.

The following list comprises the counties who have already done this, and it is hoped that in the succeeding numbers of THE JOURNAL, this list will grow until it includes every county society. If the secretary of any of the smaller county societies will demonstrate to Dr. Combs that his county society cannot

show further accessions because of the fact that every eligible doctor is already a member, the name of this secretary will be placed at the head of the list.

County	Secretary
1. Adams	B. F. Beavers
2. Dubois	W. D. Bretz
3. Elkhart	S. T. Miller
4. Knox	C. E. Stone
5. Noble	S. E. Munk
6. Whitley	F. G. Grisier
7. Allen	D. D. Johnston
8. Boone	W. H. Spieth
9. Daviess-Martin	H. C. Wadsworth
10. Gibson	A. H. Rhodes
11. Rush	J. M. Lee
12. Shelby	F. E. Bass
13. Warrick	W. P. Ford
14. Floyd	P. H. Schoen
15. Fulton	A. E. Stinson
16. Huntington	M. G. Erehart
17. Monroe	F. H. Austin
18. Porter	C. H. Dewitt
19. Clinton	L. L. Harding
20. Howard	Florence Olmsted
21. Kosciusko	O. H. Richer
22. Lake	E. E. Evans
23. Marion	Wm. A. Doeppers
24. Posey	John Ranes
25. St. Joseph	R. B. Dugdale
26. Wayne	R. L. Hiatt

MUNCIE ACADEMY OF MEDICINE

The regular meeting of the Muncie Academy of Medicine was held at the Hotel Roberts, May 11. Following the dinner Dr. Clifford Grulee, Professor of Pediatrics at Rush Medical College, Chicago, spoke on the subject, "Factors Other Than Food Which Contribute to the Welfare of the Infant". Dr. Grulee said that in the last ten years the infant mortality has dropped 40%, and the problems which confront us today are different from those of ten or fifteen years ago. The problem of clean food is largely solved, but there are accessory factors before which we should pause and take cognizance.

The temperature in which a child lives is important. Cool, fresh air is all right for the healthy, robust child. However, the sick, puny baby should be kept in an even, warm temperature—not varying more than ten to fifteen degrees in twenty-four hours. Overheating is often the cause of intestinal intoxication. This may be caused as frequently by too warm clothing on the babe as by the outside heat.

Humidity is another factor to be considered. Most homes are very low in humidity. An excess of humidity, however, is injurious, both in cold and in hot weather.

For a long time sunlight has been discussed as a beneficial factor without specific evidence, until Rollier in Switzerland has proven by clinical experience that the gradual exposure to sunlight does make sick children well. At Hopkins it has been found that rickets is more prevalent in springtime and fall, and is accompanied by decrease of phosphorous in the blood, coincident to the least exposure to the sunlight. The actinic rays are the beneficial rays of the sun. These are filtered out by glass and penetrate only such clothing as is light in both color and texture.

Premature infants often consume so much energy in taking their food from a bottle or medicine dropper, that they can not gain weight. When they are fed through a tube in the stomach they will gain steadily. Babies feeding from a bottle should have the bottle held for them to relieve their exertion as well as to avoid intake of air.

Not enough stress is placed upon vomiting when found in infants. There are three types of vomiting. First is the projectile type of vomiting known as pyloric stenosis. This is usually congenital and surgical. Second is pylorospasm, which is four or five times as frequent as pyloric stenosis, but is less frequently diagnosed. The third type is rumination, which is not so rare a condition as usually believed. Even mild cases are difficult to handle, and are a cause of malnutrition. Cases are treated by thickened food and by tying the jaws together, but are most effectively treated psychologically. Keep the attention of the child directed to other things for a while after taking

food. The so-called uncontrollable vomiting can usually be classed under **one of the three** previously named heads.

Every doctor has children with whom he can do nothing because they are spoiled. Consequently, many children thus die. Almost one-third or one-half of feeding consists in getting the child over being spoiled. Since one can begin to spoil a child from birth, it is not so strange that a large proportion of them have become so. The greatest benefit in regularity in the habits of feeding and bathing is in the training and discipline of the child. Crying uses up so much energy that the child has not enough caloric value left to gain weight.

Dr. James Carter, of Indianapolis, was a guest of the Academy also, and responded with a short talk. Dr. Grulee's answer to several questions from the physicians present concluded the program.

Adjourned.

WALTER C. STEPHENS, M. D.

U. G. POLAND, *Secretary*.

JAY COUNTY

The regular monthly meeting of the Jay County Medical Society was held at Portland on June 7th.

"Acute Indigestion" was discussed generally by the members present, due to the absence of Dr. Grant Chaney who was to present a paper on that subject. This discussion emphasized the fact that the term "Acute Indigestion" is wrongly applied to many different conditions affecting the stomach and bowels and that the incorrect use of this term should be discontinued for the best interests of the laity and the medical profession.

Dr. Charles W. Mackey gave a report on the state medical board meeting. Announcement was made of the necessity of the absolute prevention of diphtheria by vaccination. The medical profession in Jay County has taken up the question of vaccinating the children in that county.

Dr. Clarence P. Hinchman and Dr. Taylor gave short talks before the society.

The question of providing one or two beds in the Irene Byron Tuberculosis Sanatorium at Fort Wayne for patients of Jay County was discussed.

The Jay County society has subscribed for two copies of "Hygeia", the monthly magazine for lay readers published by the American Medical Association and highly recommended to the public in the interest of good health. These copies are to be placed in the woman's rest room of the court house and in the public library.

Adjournment.

HARRIET WILEY, *Secretary*.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

INSULIN.—An aqueous solution of an active principle from pancreas which effects sugar combustion. The strength of insulin is expressed in "units," one unit being one-third of the amount required to lower the blood sugar below 0.045 per cent. and cause convulsions in a rabbit weighing 2 kg. which has been previously starved for twenty-four hours. The administration of insulin to diabetic dogs and to man in severe cases of diabetes mellitus restores to the body the lost ability to oxidize carbohydrate, and glycogen is again stored in the liver. If insulin is administered at suitable intervals to a person suffering from diabetes mellitus; the blood sugar is maintained at a normal level and the urine remains free of sugar. Fat is also burned and, as a result, ketone bodies do not appear in the urine and diabetic acidosis and coma are prevented. The administration of insulin is indicated in cases of diabetes mellitus which cannot be controlled satisfactorily by dietetic treatment. Overdosage of insulin is followed by the development of serious symptoms which demand immediate treatment. Insulin is administered subcutaneously one, two or three times a day before meals. The dosage required to reduce the blood

sugar to the normal level must be established for each patient by determination of the blood sugar before and after administration of insulin. In cases of coma or severe acidosis, an initial dose of 15 or 20 units of insulin may be given, followed at 3 to 4 hour intervals by smaller doses with simultaneous administration of glucose.

INSULIN-TORONTO.—A brand of insulin. It is marketed in 5 Cc. vials containing 10 units in each Cc., and in 5 Cc. vials containing 20 units in each Cc. Connaught Antitoxin Laboratories of the University of Toronto, Toronto, Ontario, Canada.

QUININE ETHYL CARBONATE.—The quinine ester of ethyl carbonic acid. Quinine ethyl carbonate was first introduced as equinine. It is used in place of quinine sulphate and similar soluble quinine salts when a practically tasteless quinine compound is preferred.

QUININE ETHYL CARBONATE.—M. C. W.—A brand of Quinine Ethyl Carbonate—N. N. R. Mallinckrodt Chemical Works, St. Louis, Mo. (*Journal. A. M. A.*, June 2, 1923, p. 1617).

ARSPHENAMINE-MALLINCKRODT.—A brand of arspenamine—N. N. R. (See New and Nonofficial Remedies, 1923, p. 46). It is marketed in ampules containing, respectively, 0.1 Gm., 0.2 Gm., 0.3 Gm., 0.4 Gm., 0.5 Gm., 0.6 Gm. and 1.0 Gm. Mallinckrodt Chemical Works, St. Louis, Mo.

BARBITAL.—M. C. W.—A brand of barbitol—N. N. R. (See New and Nonofficial Remedies, 1923, p. 62). Mallinckrodt Chemical Works, St. Louis Mo.

CINCHOPHEN.—M. C. W.—A brand of cinchophen—N. N. R. (See New and Nonofficial Remedies, 1923, p. 90). Mallinckrodt Chemical Works, St. Louis, Mo.

MERCURIC CYANIDE.—M. C. W.—A brand of mercuric cyanide—N. N. R. (See New and Nonofficial Remedies, 1923, p. 194.) Mallinckrodt Chemical Works, St. Louis, Mo. (*Jour. A. M. A.*, June 16, 1923, p. 1775)

ILETIN (Insulin-Lilly).—A brand of insulin. (See *Jour. A. M. A.*, June 2, 1923, p. 1617.) It is marketed in 5 Cc. ampules containing 10 units in each Cc. and in 5 Cc. ampules containing 20 units in each Cc. Eli Lilly & Co., Indianapolis, Ind. (*Jour. A. M. A.*, June 23, 1923, p. 1851.)

AMIDOPYRINE.—Abbott.—A brand of amidopyrine—N. N. R. (See New and Nonofficial Remedies, 1923, p. 250.) It is marketed in substance and in 5 grain tablets. Abbott Laboratories, Chicago, Ill.

EPINEPHRIN CHLORIDE SOLUTION.—Abbott.—A solution containing epinephrine chloride, equivalent to 1 part of epinephrine in 1,000 parts of physiological solution of sodium chloride, preserved by the addition of benzoic acid and saturation with carbon dioxide. For a discussion of the actions, uses and dosage of epinephrine see New and Nonofficial Remedies, 1923, p. 112. Abbott Laboratories, Chicago, Ill. (*Jour. A. M. A.*, June 30, 1923, p. 1910).

PROPAGANDA FOR REFORM

THE INTRACARDIAC INJECTION OF EPINEPHRIN.—Recently much publicity has been given to the power of epinephrin, when injected into the heart, to produce a response resulting in revivification when the heart has apparently ceased its action from certain causes. Of the many cases which have been reported, a remarkable one is that in which collapse occurred during an examination for extra-uterine pregnancy. After other methods had been tried without avail, an intracardiac injection of epinephrin was given. In ten seconds the heart sounds became perceptible. Four weeks later the patient was discharged as well. It must be borne in mind that the instances in which such restoration can be utilized are rare. When death comes as the result of the wearing away of tissues, as the result of toxic action of either bacterial or metallic poisons, or as the result of destruction of vital organs, it would be cruel and futile to arouse false hopes by what could only be a sensational experiment. (*Jour. A. M. A.*, May 5, 1923, p. 1314).

INTRAVENOUS THERAPY.—For some years the Council on Pharmacy and Chemistry has urged conservatism in the adoption of the intravenous method of administering drugs. It has been necessary to do this to offset the propaganda of proprietary firms that, for commercial purposes, feature the indiscriminate use of intravenous therapy. In order that the status of this form of drug administration might be presented to the profession, and that it might be made clear under just what conditions the intravenous administration of drugs is warranted, the Council publishes a report prepared by a committee which studied the problems involved. The report discusses the fallacy of the arguments commonly advanced by those who advocate intravenous therapy as a routine. The Council has no desire to discredit the rational use of drugs by intravenous injection, but on the contrary, it seeks to avoid the accidents and disappointments that must follow the abuse of a method which, rightly employed, may be a life-saving measure. The Council places itself on record as opposing the reckless and indiscriminate use of drugs by intravenous injection with its attendant dangers and increased needless expense to the patient. However, the Council recognizes the legitimate, life-saving nature of the intravenous administration of drugs in extreme cases. (*Jour. A. M. A.*, May 5, 1923, p. 1331.)

ETHYLENE AND ACETYLENE.—There is a revival of interest in two gas anesthetics: ethylene and acetylene. Both gases were the subject of experiment in anesthesia many years ago. The studies of A. B. Luckhardt and J. B. Carter and of W. E. Brown with ethylene confirm the earlier experiences and hold out promise of the usefulness of the gas. In the recent experiments with acetylene the objectionable odor of the gas has been overcome by the addition of oil of pine. A mixture of acetylene, 40 parts, and oxygen, 60 parts, flavored with oil of pine, has been used in major operations. The advantages claimed for acetylene are: rapid induction; simplicity of administration; safety; absence of struggling and excitement, and rapid recovery. Both ethylene and acetylene are asphyxiants. Their usefulness in relation to that of nitrous oxid, and also to ether, remains to be demonstrated. (*Jour. A. M. A.*, May 12, 1923, p. 1383.)

FLEISCHMANN'S YEAST NOT ADMITTED TO N. N. R.—In March, 1921, the Council on Pharmacy and Chemistry took up the consideration of Fleischmann's Yeast on account of the extensive and extreme therapeutic claims which were made for this preparation. Since then the Council has given much attention to the subject of yeast therapy. After consulting with eminent students of nutrition and clinicians qualified to speak with authority on questions of nutrition, dietotherapy and pediatrics, the Council concluded that there was little likelihood that the administration of yeast or yeast preparations will be of therapeutic value in many cases for which they are advertised. The Council finds that many advertisements for Fleischmann's Yeast are misleading in that they tend to create the belief that many diseases are prevented or cured by its use. Advertisements addressed to physicians are likely to lead to the belief that the efficacy of yeast therapy in many conditions has been established. Advertisements addressed to the public are bound to create the opinion in the mind of the lay reader that reliance may be placed on yeast in many conditions. The Council refused recognition to Fleischmann's Yeast (1) because it is advertised by means of unwarranted and misleading therapeutic claims, and (2) because it is advertised to the public with unwarranted therapeutic claims that may become a detriment to the public health. (*Jour. A. M. A.*, May 12, 1923, p. 1398.)

THE STANDARDIZATION OF PITUITARY EXTRACT.—Pituitary extract—a solution containing the water soluble principle or principles from the fresh posterior lobe of the pituitary body of cattle—is official in the U. S. Pharmacopeia as Solution of Hypophysis, and a method of standardization is prescribed. In practice the

pharmacopeial standard has been found unreliable and manufacturers have adopted various modifications. Further, the pharmacopeial solution has been found too weak, and stronger preparations are being marketed. Some of these have been accepted for New and Non-official Remedies. The wide variation in the strength of pituitary extracts and the unsatisfactory character of pharmacopeial assay method are shown in a study carried out by Erwin E. Nelson, and a study by Morris J. Smith and Wm. D. McKlosky. The next pharmacopeia should provide a pituitary solution of satisfactory strength and an assay method which will insure a satisfactory control of this important medicament. Until such a standardization is provided, the physician will do well to use one of the pituitary preparations accepted for New and Nonofficial Remedies, which he has found to be satisfactory. (*Jour. A. M. A.*, May 19, 1923, p. 1473.)

TRYPARSAMIDE.—The Council on Pharmacy and Chemistry publishes a preliminary report on the experimental status of Tryparsamide. The drug is an arsenical developed in the Rockefeller Institute for Medical Research. Pending the outcome of clinical studies, the substance is not offered for sale. Tryparsamide is primarily a trypanocidal agent, but it possesses some spirocheticidal activity. It is said to produce "tonic" effects. It is proposed for use in the treatment of trypanosomiasis, syphilis of the central nervous system and late stages of syphilis with inactive or indolent lesions, and it is said to be specially indicated in the treatment of cachectic individuals. The Council states that the favorable reports of the effect of Tryparsamide on trypanosomiasis and neurosyphilis appear to warrant controlled trials of the drug in these conditions, but also warns that the possibility of harm to vision must be given due consideration. The Council postponed the acceptance of Tryparsamide for New and Nonofficial Remedies until its therapeutic value and safety are established, and until it is on the market. (*Jour. A. M. A.*, May 26, 1923, p. 1521.)

FIBROFORM AND THE NOLAN INHALER.—"A cure for pulmonary tuberculosis by the use of pure carbon and calcium was claimed by Dr. Wm. T. Nolan of Jeannette, Pa., in an address before the Westmoorland County Medical Society in Greensburg, Pa." This was the first paragraph of a news story sent out by the Associated Press. The treatment, it seems, consists of the inhalation of a fine powder said to be made by mixing soot with calcium carbonate, phosphate, chloride and lactate. This, Dr. Nolan calls "Fibroform." Fibroform is used by means of the Nolan Inhaler. The outfit appears to be supplied by Dr. Nolan for one hundred dollars. As no quantities are given, the composition of this latest "consumption cure" is secret. The treatment is put forward on the basis of utterly inadequate tests made only by its sponsor. (*Jour. A. M. A.*, May 26, 1923, p. 1535.)

CALCIUM THERAPY IN TUBERCULOSIS.—From a review of the literature, Maver and Wells concluded that there is no convincing clinical evidence of the value of calcium administration in tuberculosis. They believe that no deficiency in blood calcium exists in tuberculosis patients. From carefully controlled animal experiments these investigators conclude that calcium administration does not affect the course of tuberculosis in animals. If the use of calcium compounds in the treatment of tuberculosis is to be continued, clinical experiments of a scientific character should be conducted. At the present time there appears to be no scientific basis for the use of calcium in tuberculosis. (*Jour. A. M. A.*, June 2, 1923, p. 1619.)

PROGRESS AND CONSERVATISM IN THERAPEUTICS.—The Committee on Therapeutics of the Council on Pharmacy and Chemistry has published a communication calling attention to two books which physicians should have—New and Nonofficial Remedies and Useful Drugs. It is explained by the Committee that for eighteen years the

Council has done its utmost to bring before the medical profession the truth concerning the new proprietary medicinal preparations which are being offered to the profession. The work and functions of the Council are discussed, and it is explained that while the Council was organized primarily to put a stop to the exploitation of proprietary medicines under false claims and the use of secret preparations, its activities have broadened until its work may now be characterized as a "propaganda for the rational use of drugs". The communication concludes: "New and Nonofficial Remedies" and "Useful Drugs" together furnish information concerning all drugs, old and new, which are at present essential to, or give promise of value in, the practice of medicine. They have been compiled with a special object in view, namely, to meet the needs of the student and practitioner of today. The report is signed by C. W. Edmunds, M. D., Professor of Materia Medica and Therapeutics, University of Michigan, Ann Arbor, Mich., John Howland, M. D., Professor of Pediatrics, Johns Hopkins University, Department of Medicine, Baltimore, Md., Ernest E. Irons, M. D., Ph. D., Associate Professor of Medicine, Rush Medical College, Chicago, Ill., W. T. Longcope, A. B., M. D., Professor of Medicine, Johns Hopkins University, Department of Medicine, Baltimore, Md., G. W. McCoy, M. D., Director Hygienic Laboratory, U. S. Public Health Service, Washington, D. C., W. W. Palmer, B. S., M. D., Bard Professor of Medicine, College of Physicians and Surgeons, Columbia University, New York City, Francis W. Peabody, M. D., Professor of Medicine, Medical School of Harvard University, Boston, Mass., L. G. Rowntree, M. D., Sc. D., Professor of Medicine, Mayo Foundation, Rochester, Minn. (*Jour. A. M. A.*, June 2, 1923, p. 1635).

MORE MISBRANDED NOSTRUMS.—The following preparations have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Woods V. Tabules (Edward J. Woods), containing zinc phosphid, strychnin and plant extractives. Lukosine (National Drug Co.), a powder containing approximately 80 per cent. of boric acid and small proportions of zinc sulphate, alum and a salicylate, and traces of alkaloid, phenol, thymol and menthol. Eckman's Alternative (Burrows-Little-White Co.), consisting essentially of 94.4 per cent. of water flavored with clove oil 3.3 per cent. of calcium chlorid and 2.3 per cent. of plant extractives. Gombault's Caustic Balsam (Lawrence-Williams Co.), a mixture of a fatty oil with approximately 20 per cent. by volume of oil of turpentine. McGraw's Oil of Life (McGraw Remedy Co.), consisting approximately of 95 per cent. of kerosene and small proportions of turpentine oil, tar oil and camphor. Vital Sparks (Hollander-Koshland Co.), gelatin capsules containing a fatty oil, colored red, and a sugar coated pill of zinc phosphide, damiana and strychnin. Mydyl Anti-septic Wafers (Chas. S. Ruckstuhl), composed of borax and starch. Syrup Leptinol (Balsamea Co.), consisting of *Leptotaenia dissecta* (a plant belonging to the parsnip family), sugar, glycerin, alcohol and water. Sangvin (Dr. M. Spiegel & Sons), composed essentially of plant drugs including a laxative drug, sugar, alcohol, glycerin and water. Peterson's Ointment (Peterson's Ointment Co., Inc.), a petrolatum ointment containing zinc oxid, tannin, phenol, and camphor. (*Jour. A. M. A.*, June 9, 1923, p. 1710.)

COD LIVER OIL IN TUBERCULOSIS.—Experiments carried out in the Hygienic Laboratory of the U. S. Public Health Service to determine the effect of cod liver oil on the tuberculosis of the guinea-pig failed to show any definitely beneficial effects. There was no evidence of the deposition of calcium when this element was administered alone with the cod liver oil. These results warn against unwarranted optimism and justify critical investigation whenever calcium or cod liver oil are lauded as a specific in tuberculosis. (*Jour. A. M. A.*, June 16, 1923, p. 1778.)

PEPTONE IN THE TREATMENT OF MIGRAINE.—The Council on Pharmacy and Chemistry publishes a preliminary report on the experimental status of the use of peptone in the treatment of migraine. Drs. Joseph L. Miller and B. O. Raulston report that the intravenous administration of Peptonum Siccum-Armour brought about improvement in a considerable number of cases. The Council points out that commercial peptones are heterogenous mixtures of uncertain composition, and that the results reported may have been due to tissue impurities rather than to peptone itself. It is, therefore, evident that the reported results cannot be made the basis for a rational treatment of migraine. Peptonum Siccum is stated by Armour & Co. to contain 90 per cent. of protein. Seventy per cent. of the protein content is in the form of peptone and secondary proteoses, while the remaining thirty per cent. is in the form of amino-acids. Those who wish to make experiments with peptone in the treatment of migraine should use the particular peptone used by Miller and Raulston or one which has an essentially similar composition. (*Jour. A. M. A.*, June 30, 1923, p. 1910.)

BOOK REVIEWS

LEGAL MEDICINE AND TOXICOLOGY, by many specialists. Edited by Frederick Peterson, M. D., Manager Craig Colony for Epileptics; Walter S. Haines, M. D., late Professor of Chemistry, Materia Medica and Toxicology, Rush Medical College; and Ralph W. Webster, M. D., Assistant Professor of Medical Jurisprudence, Rush Medical College. Second edition. Two Octavo Volumes, totalling 268 pages, with 334 illustrations, including 10 insets in colors. Philadelphia and London: W. B. Saunders Co. 1923. Cloth, \$20.00 net.

So far as we know this is the only work of its kind published and it is gratifying to know that it has been written by recognized specialists, of which a large number have contributed articles upon which each has been particularly qualified to write with authority. For convenience of reference the work has been divided into two sections, part 1 and part 2, the latter being devoted to toxicology and all other portions of legal medicine in which laboratory investigation is an essential feature. These two volumes are of inestimable value to members of the legal as well as the medical profession for the information and opinions expressed cover the elucidation and determination of questions in law requiring technical knowledge of the medical sciences. This work is so comprehensive and the subject matter is so well presented that it is considered unnecessary to call attention to any particular chapters, none of which it would be possible to improve upon very much, if any. An enumeration of the subjects discussed will give an idea as to the comprehensiveness of the work. Volume 1 gives an introduction in which expert evidence from the standpoint of the medical man as well as the lawyer is considered and the rules of legal procedure in medico legal cases. This chapter should be read by every physician and every lawyer who may be interested in a medico legal controversy. Succeeding chapters have the following titles: Legal Rights and Obligations of Physicians; Identification of the Living; Identity; The Signs of Death; Sudden Death; Death From Cold, Heat and Starvation; Death and Injuries by Lightning and Electricity; Wounds; Gunshot Wounds; Burns and Scalds; Railway Injuries; Injuries and Disorders of the Nervous System Following Railway and Allied Accidents; Speech Disorders; Inebriety; The Stigmata of Degeneration; Mental Disorders in Medico-legal Relations; Mental Defect Group; Mental Perversions of the Sexual Instinct; Malingering and the Feigned Disorders; Summaries of State Laws Relating to the Insane; The Legal Aspects of Pregnancy; Legiti-

(Continued on Advertising Page xx)

Just What a Ligature Should Be

Strong, Smooth, Supple and Thoroughly Sterile

Armour's Surgical Catgut. Boilable, plain and 10, 20, 30 day chromic, 60 inch.

Non-boilable, plain and 10, 20, 30 day chromic, 60 inch, soft as silk.

Iodized (non-boilable) 60 inch, very flexible.

Prepared from lambs' gut selected in our own abattoirs especially for surgical purposes, \$3.00 per dozen, discount on one gross and larger lots.

Suprarenalin Solution

(1:1000)

1 oz. cup stoppered vials.
Free from preservatives.



Pituitary Liquid

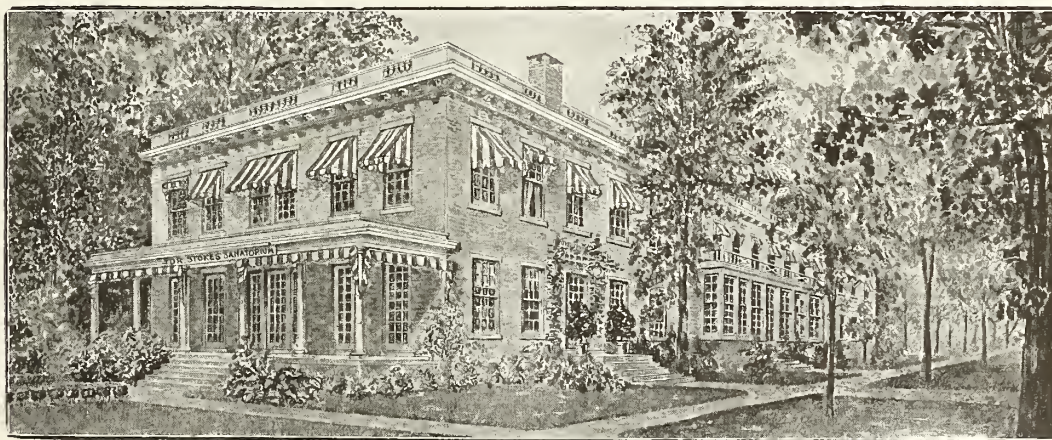
1 c. c. (surgical), ½ c. c.
(obstetrical) ampoules.
Free from preservatives.

BOOKLET ON THE ENDOCRINES FOR MEDICAL MEN

ARMOUR AND COMPANY

CHICAGO

DR. STOKES SANATORIUM



HOME FOR THE INCURABLE INSANE, AGED AND INFIRM

A strictly modern sanatorium, fully equipped for the scientific treatment of all nervous and mental affections. Situation retired and accessible.

Alcoholic and Drug Habit Treated by the Gradual Reduction Method Only

An addition of thirty rooms has lately been added to our already large sanatorium. This makes it possible for us to separate all male and female mental patients. For details write

DR. STOKES SANATORIUM

923 Cherokee Road

EDGAR W. STOKES, M.D., Supt.

Louisville, Kentucky

BOOK REVIEWS

(Continued from Page 240)

macy; Birth and Legitimacy; Abortion; Infanticide; Impotence and Sterility; Rape; Unnatural Sexual Offenses; Marriage and Divorce; The Medicolegal Aspects of Vision and Audition; The Medicolegal Relations of Veneral and Genito-Urinary Disorders; The Medical Jurisprudence of Life Insurance; The Medical Jurisprudence of Accident Insurance.

Volume 2 dealing with toxicology has the following chapters: General Principles of Toxicology; Forensic Questions Relative to Poisoning; The Technic of Medicolegal Postmortem Examinations; Inorganic Poisons; Gaseous Poisons; Death from Asphyxia; Alkaloidal Poisons; Non-Alkaloidal Organic Poisons; Industrial Toxicology; Food Poisoning and Food-Borne Infections; Poisonous Mushrooms; Poisonous Proteins; Postmortem Imbibition of Poisons; The Destruction and Attempted Destruction of the Human Body by Fire and Chemicals; Death from Pounded Glass and Other Mechanical Irritants; Medicolegal Examination of Blood and Blood-Stains; Medicolegal Examination of Seminal Stains; Medicolegal Examination of Hairs; Medicolegal Relations of the X-Rays, Radium, and Ultra-Violet Rays; The Common Law and Statutory Obligations of Pharmacists.

We can not too highly recommend this work. It is comprehensive, authoritative, well illustrated and the publishers' work has been well done.

ANIMAL PARASITES AND HUMAN DISEASE, by Asa C. Chandler, M. S., Ph.D., instructor of Biology, Rice Institute, Houston, Texas. Second edition, revised, cloth, 570 pages. \$4.50. John Wiley & Sons, publishers, New York, 1922.

This is the second edition, revised, of a book that has been written for all persons interested in human health and its maintenance, particularly physicians, public health officers and nurses. The aim of the author is to present the important facts of parasitology as related to human disease in such a manner as to make it readable and useful, not primarily to the parasitologist but to the public health and immigration service officers, to the physicians who are concerned with something more than their local practice, to teachers of hygiene, domestic science or other subjects in which health and preventive medicine are important, to college and high school students, to the travelers and to the farmer or merchant who is interested in the progress of science and civilization. Particular attention is paid to the effects of parasites on their human hosts whether directly as parasites or as disease transmitting agents to their life histories, to their means of dissemination and to the proper methods of treatment and prevention. The author has made an attempt to avoid technical phraseology and omit lengthy descriptions and minute differentiations which would lessen the value of the book to the lay reader. Altogether the book is a valuable contribution to our literature and will prove interesting to both lay and professional readers.

CLINICAL LABORATORY METHODS. By R. L. Haden, M. A., M. D., 294 pages with 69 illustrations and 5 color plates. 1923. Price \$3.75. C. V. Mosby & Co.

This little volume presents the favorite selected laboratory methods as used by the author, and is intended for physicians and technicians. While presenting nothing new and while it is narrowed by giving only one method for each test, the work is up-to-date, giving methods for blood chemistry, etc.

CEREBRO-SPINAL FLUID IN HEALTH AND DISEASE. A. Levinson, B. S., M. D., 2nd Edition. Revised and enlarged. 267 pages with 69 illustrations including 5 color plates. C. V. Mosby & Co. Price \$5.00.

An up-to-date, revised edition of this valuable little book should be hailed with pleasure by those interested in the study of body fluids. The chapters on the physical and chemical properties and pathology have been almost entirely rewritten, bringing them thoroughly up-to-date. We recommend this book cheerfully.

ANAPHYLAXIS AND ANTI-ANAPHYLAXIS AND THEIR EXPERIMENTAL FOUNDATIONS. By Dr. A. Besredka, Prof. Pasteur Institute, with a preface by Dr. E. Roux, Director of Pasteur Institute. English Edition by S. R. Gloyne, M. D., Pathologist London City Hospital, 143 pages. Price \$2.25. C. V. Mosby & Co.

This little book is of great practical value to serologists dealing as it does with the history, characteristics and phenomena of anaphylaxis.

A PRIMER FOR DIABETIC PATIENTS: A brief outline of the principles of diabetic treatment, sample menus, recipes and food tables. By Russell M. Wilder, M. D., May A. Foley, and Daisy Ellithorpe, Dietitians—The Mayo Clinic. 12 mo. of 76 pages. Philadelphia and London: W. B. Saunders Co., 1921. Price \$1.50.

This book gives in a plain manner many useful recipes and formulas and should be a help to physicians in the education of their diabetic patients which is so necessary to success.

ANATOMY AND PHYSIOLOGY. E. H. Bundy, M. D., Supt. Connecticut Training School for Nurses. 5th edition, revised and enlarged. 1923 for training schools. 266 illustrations, 46 in colors. Blakiston Son & Co. Price \$2.50.

This wonderful little work gives a plain, precise description of the anatomy and physiology of the human body. The chapters on digestion, metabolism, ductless glands and sexual organs are especially well presented.

BACTERIOLOGY—GENERAL, PATHOLOGICAL AND INTES-TINAL. By A. I. Kendall, B. S., Ph. D., D. P. H. Prof. Bacteriology Northwestern University Medical School. 2nd edition revised, with 99 engravings and 8 plates, 1923. Lea & Febiger. Price \$6.00.

In revising this work the author has taken note of the considerable advances in bacteriology resulting from the war, especially in the anaerobic groups. This work is a complete and comprehensive treatise of the realm of bacteriology. A good description is given of all the new recognized bacterial groups. This work should have a place in every laboratory library.

PRINCIPLES OF BIOCHEMISTRY. By T. B. Robertson, Ph. D., D. Sc., Prof. of Physiology and Biochemistry of University of Adelaide, South Australia. 633 pages with 49 engravings. Lea & Febiger, Philadelphia. Price \$8.00.

For students of medicine, agriculture and related sciences. This book dwells particularly on the practical applications of the subject matter in interpreting the functions of living matter. It is a well written, comprehensive work and is recommended to the chemist dealing with biologic products.

NEW AND NONOFFICIAL REMEDIES, 1923:—Containing in 415 pages, descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1st, 1923. Price \$1.50.

In view of the multitude of trade names and the many new remedies foisted upon the medical profession, every physician should have this book in his library. The descriptions and information on each accepted article is based either on investigation on the part of the Council of Pharmacy or on statements given by the manufacturer which have been found acceptable. By consulting this work freely one may know the reliable preparations.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XVI

AUGUST 15, 1923

NUMBER 8

ORIGINAL ARTICLES

HYPERTENSION AND NEPHRITIS*

JAMES G. CARR.
CHICAGO

"The frequent occurrence of hypertrophy of the heart, with or without valvular lesion or thickening of the walls of the aorta, in diseases of the kidney was first pointed out by R. Bright, in connection with his investigations on the connection between the renal disease and dropsy. Among his 100 cases, 27 were found to be free from any form of cardiac disease, while in 6 the point is not mentioned, and it may therefore be assumed that no marked abnormality was present. Of 52 cases of cardiac enlargement, 34 were free from valvular disease, although 11 of these presented thickening of the aorta, leaving 23 cases in which there was probably no organic cause for the pronounced hypertrophy, which in most cases had affected the left ventricle. The observation led Bright, as he said, to look for a less local cause for the unusual exertion to which the heart is spurred on. He believed that the change in the constitution of the blood acted as an unusual and irregular stimulus on the organ directly, or that it affected the smaller vessels and the capillaries in such a way as to require a greater exertion to drive the blood through the terminal ramifications of the vascular system. Cardiac hypertrophy to a certain degree, may be observed to advance *pari passu* with the progress of the renal affection." These ideas of Bright occasioned discussion but did not meet with general acceptance, and it was left for Traube, some twenty years later, to attempt a classification of kidney disease, by which he gained wide renown. "Traube's work, particularly his subdivision and clinical description of the various renal affections, which up to this time had been included under the term Bright's Disease, soon won universal recognition. On the other hand, his explanation of the mechanism of cardiac hypertrophy in nephritis, to which the writer will revert presently, elicited lively discussion and led to a number of clinical, anatomical and experimental investigations which have resulted in

the accumulation of a very large supply of material available for the study of the cardiovascular changes occurring in diseases of the kidney, but so far have not resulted in any generally accepted explanation."

In these words, written more than twenty years ago, Senator began his discussion of the changes in the vascular apparatus in renal disease. The last sentence can be applied without change to the situation which confronts us today. The past two decades have seen many brilliant anatomical, clinical and experimental studies regarding the vascular changes in chronic nephritis, yet thus far these "have not resulted in any generally accepted explanation." I have nothing new to offer you today and no attempt will be made to cover the enormous literature on the subject, yet I trust that it will not prove altogether a work of supererogation to discuss the relationship of hypertension and nephritis and to emphasize some of the lines along which real progress has been made in our knowledge. You have noted that this subject of many years discussion has shifted somewhat since the days of Bright and Traube; then the interest was centered about the cardiac hypertrophy, now, about the hypertension, to which the cardiac hypertrophy is now generally believed to be due. The introduction of the sphygmomanometer into clinical medicine served to accentuate the interest of the profession in the vascular changes and, doubtless, was largely responsible for the exaggerated emphasis which, for so long, was put upon nephritis as the cause of hypertension. It is not so long since that high blood pressure was almost universally regarded as denoting the presence of nephritis; there was a widespread opinion that hypertension meant nephritis. We will consider today, particularly, the reasons why this extreme view is not tenable and hope to show that our more recent ideas offer practical help in the realms of prognosis and treatment.

The earlier views were shaken because of the work of both clinicians and pathologists. The latter have pointed out on many occasions that the height of the blood pressure bears no constant relationship to the presence of pathological change in the kidney, that the presence of renal changes, properly called nephritis, cannot be inferred simply because of a persistent rise of blood pressure

*Read before the Ninth Councilor District, Lebanon, Indiana, May, 1923.

even though that rise is often extreme. Not infrequently anatomical examination has revealed kidneys practically or altogether free from disease, macroscopically and microscopically, in the bodies of individuals who had shown marked rise of the blood pressure. To quote Moschcowitz, "A hypertension may occur with normal kidneys or kidneys practically normal." The evidence supplied by anatomical studies has been repeatedly confirmed by the results of the functional renal tests which have been employed during the last ten years. These tests have shown repeatedly and conclusively that normal renal function may be coexistent with hypertension of extreme degree.

The functional tests used in these examinations are based on the various activities of the normal kidney. Under normal conditions, the kidney possesses the power to alter the quantity and specific gravity of the urine in response to the amount of fluid which the individual may imbibe. Given for instance an intake of 1500 c.c. of water at one time or over a short period of time, the normal kidney should excrete within four hours a quantity in excess of the normal output equal to most of the added intake and the urine thus excreted should have a distinctly lower specific gravity than the usual urine of this individual. Within twenty-four hours all the added amount should be excreted. On the other hand, definite limitation of the fluid intake over a period of twenty-four hours should be followed by the passage of less than the usual amount of urine with a higher specific gravity. A further fact of importance is this: The total urine passed in the day time (from 8:00 a. m. to 8:00 p. m.) should exceed the total passed at night by about 100 per cent. Roughly speaking the night urine should equal one-third or a little more of the total twenty-four excretion and any marked deviation from this normal condition is of great significance. Moreover the night urine should have normally a specific gravity distinctly higher than that of the day urine. With advancing renal insufficiency there is a progressive tendency to a fixation of the specific gravity of the various specimens, and this fixation is likely to be at a low level. Every one of you will recall the words of Osler used in his definition of chronic interstitial nephritis, "The passage of a large amount of urine of a low specific gravity." However we may explain the fact, it is a fact that such large amounts of urine are usually found in certain types of nephritis, and the specific gravity of this urine is fixed at a level considerably below the normal. This tendency of the diseased kidney to lose the power of concentration and dilution has been taken advantage of in certain standard tests; it is, in fact, an essential part of the elaborate Mosenthal test and affords, used by itself, a simple and valuable test of renal function which needs for its successful use only the careful directions of the physician and the cooperation of an intelligent patient. Let us assume

that we wish to make the test; we will give to the patient about 1500 c.c. of fluid in the twenty-four hours, all being given with the meals, no fluid being allowed between meals. Beginning at eight a. m. (the bladder having just been emptied) the first meal is given with a measured quantity of fluid; two hours later the patient is asked to pass urine; this urine secreted shortly after the intake of fluid should be fairly large in amount and low in specific gravity. After another two hours the urine is passed again and this time the quantity should be less and the specific gravity higher. At twelve the second meal is given and urine is collected at two, four and six. At six the third meal is given and the urine is collected at eight. All the urine passed in the twelve hours from eight p. m. to eight a. m. is saved. Thus we have seven specimens of urine. The total quantity of the day urine should exceed the night urine as stated and the specific gravity of the night urine should be higher than that of the total day urine and in general higher than that of the specimens passed during the day. There should be a variation in the specific gravity of the different specimens of at least eight points between the highest and the lowest specimens of the group. The specimens should also vary in quantity, the larger quantities being passed soon after the intake of fluid. Fixation of the specific gravity at a low level and the passage of nearly like amounts at the stated periods may be regarded as proof of the existence of a well established nephritis, if the rare condition known as diabetes insipidus can be excluded.

The Mosenthal test is more complete, providing, as it does, for the study of the excretion of protein decomposition products and of the chlorides. It is also more difficult to execute, both because of the necessary supervision which must be given to the patient and the complex chemical tests which are required. But the results of this test, of the studies of the blood chemistry and of the simple but less accurate phthalein test are at one in confirming us in the opinion that nephritis and hypertension are not synonymous terms, are not, indeed, necessarily associated. The phthalein test which is carried out by the injection of a simple substance giving color reactions in the urine may be combined with observation as to the renal capacity to vary the specific gravity of the urine inasmuch as it is customary to give some 500 c.c. of water at the time the substance is injected; thus the normal kidney should excrete a urine of low specific gravity and a large quantity of such a urine in the two hours over which the test is prolonged.

Supported by these clinical and pathological studies, we may state with confidence that hypertension can no longer be regarded as justifying the conclusion that nephritis is the cause of the high pressure. There is no necessary connection between hypertension and anatomic nephritis nor

between hypertension and renal insufficiency. We may and do have hypertension without clinical or anatomical nephritis and we also often have nephritis without hypertension. This latter group has long been recognized; it is not of such cases that we wish to speak today. In the minds of most of us high blood pressure is associated with that type of renal disease which we call the "chronic interstitial"; with this variety of renal disease hypertension is commonly found, but the point upon which I wish to put the emphasis now is this, hypertension, even of extreme degree, often is found in the absence of any signs or symptoms of renal disease or renal insufficiency. We may, therefore, separate two broad groups of hypertensive cases, those with the evidence of renal damage and those without such evidence. I believe it is desirable to keep before our minds that the differentiation between the groups rests upon the evidence of normal or disordered function of the kidney. This does not confine us to the newer functional tests; albuminuria, in the absence of cardiac decompensation or of other renal disease, in association with hypertension may be accepted as proof of renal disease, particularly when accompanied with casts.

Janeway pointed out this distinction between the types in an article published in 1913. From this article we quote this passage: "From a study of this kind it is clear that the patients naturally fall into certain groups as regards symptoms and clinical course. The largest group is made up of individuals well past middle life. The clinical picture which they present is usually that of some degree of cardiac insufficiency, and their death is a cardiac death. Arteriosclerosis is a commonly associated lesion; anginoid attacks are fairly frequent; about 10 per cent., are elderly diabetics. While the bulk of them at some period show albumin, casts or other urinary changes, usually interpreted as indicating nephritis, and while at autopsy the majority prove to have either arteriosclerotic atrophy of the kidneys or the so-called "primary contracted kidney", it must be borne in mind that during life many of these individuals fail to show any urinary changes other than these of chronic passive congestion. There are also a number of authenticated autopsy cases on record in which the same clinical picture of permanently high blood pressure has been associated with kidneys found to be normal or with only secondary congestion, due to a failing heart. I have seen such patients, and Krehl and Schlayer have published records of similar ones. * * * When so obvious a disturbance of the circulation exists and investigation of the kidney function shows no changes of importance it is immaterial what may be the exact appearance of the kidney; the patient must be treated from the standpoint of the circulatory disorder."

That these facts might be presented more concretely I have reviewed the histories of 57 cases

of hypertension and nephritis, taken from the files at the County Hospital. These were under treatment during the last three months. In eight cases there were autopsy reports; these cases will be considered separately. In all there were 26 cases in which the blood pressure was 190 or over; in four of these there was no evidence of renal disease either in the urine or the blood; three of these latter cases had systolic pressure of 210 or above; seven cases showed normal urinary findings (exclusive of the tests for fixation of the specific gravity which were not often made), but retention of only very moderate grade, so slight as to be of questionable significance; in one of these cases the systolic pressure was 240; all other cases in this group showed definite evidence of renal damage, in a few instances the retention was of high grade. In 15 cases with the pressure (systolic) between 160 and 190, there was only one case which did not show some evidence of renal disease; four showed only minor evidence of such a condition. In the other ten the evidence of kidney disease was well defined; two cases showed fixation of the specific gravity, varying little either way from 1013. There were five cases with the systolic pressure below 160; all gave strong reactions for albumin and casts were abundant; in two the retention was advanced, in one slight and in the other two the chemical examination of the blood was not made. In one case there was a fixation of the specific gravity between 1012 and 1010. Of the 26 cases with systolic pressures above 190, eight or 30.8 per cent. showed large quantities of albumin; of the fifteen with pressure between 160 and 190 eight or 53.3 per cent. showed much albumin and of the five below 160, three or 60 per cent. had large quantities of albumin. In both the latter groups there was a greater proportion of cases in which renal involvement was apparent clinically; in other words, renal insufficiency is rather more likely to be found with the milder grades of hypertension than with the more advanced. When the systolic pressure is above 200, we are less likely to be dealing with a true nephritis than in these cases in which the pressure is between 160 and 190. Of the eight cases which went to autopsy, there were five in which the systolic pressure had been above 200; two were found with red granular kidneys (chronic diffuse nephritis), one with an acute nephritis superimposed on a chronic process, and one with secondary contracted kidneys. The fifth had died of a condition which was unlike uremia and the autopsy showed only a "slight" chronic diffuse nephritis. Only a trace of albumin had been found in the urine with no casts and the blood chemistry had shown normal figures. Death was undoubtedly of cardiac origin and the hypertension was present without demonstrable renal pathology. Of the other cases, one with a pressure of 150/90 showed a red granular kidney and another with a pressure of 180/90 was diagnosed

anatomically as chronic diffuse nephritis. With the exception of the case noted, as not being uremic and not showing definite nephritis, all of these cases showed the usual evidences of nephritis, albumin, casts and marked retention. The eighth case was diagnosed incorrectly as nephritis; there was marked edema with albumin and casts but with normal blood chemistry, with urine of variable specific gravity and a systolic pressure of 150/90. The autopsy showed no nephritis but passive congestion of the kidneys with cardiac disease, the coronary arteries being sclerosed and there being found an old infarction of the apex in the left ventricle with diffuse fibrous myocarditis. If we consider the diastolic pressure alone there were 22 instances in which this was over 120; in seventeen of these there were definite evidences of nephritis and in the other five the evidence of nephritis was slight but present. No case in the group could be said to be entirely free of signs or symptoms of renal disease. Of the cases with diastolic pressures below 120, nine showed no evidence of renal disease, eleven showed slight evidence of such disease and the remaining fifteen presented definite findings which warranted the diagnosis of nephritis. Yet when we study our figures more closely it appears that we are not warranted in drawing any far reaching conclusions even in regard to those cases with high diastolic pressure. Our first impression is that the presence of a high diastolic pressure points quite decidedly to the existence of a true nephritis; this conclusion must be stated with reserve since of the five cases in which the diastolic of 120 or above was found associated with slight symptoms of nephritis, one with a diastolic pressure of 160 showed only a faint trace of albumin and no other findings which would substantiate the diagnosis of nephritis, a second with a diastolic of 130 presented nothing except a minor grade of nitrogenous retention and a third with the diastolic pressure 166, showed neither albumin nor casts though nitrogenous retention was definite. All we may say is that the existence of a high diastolic pressure, especially of 120 or more is strong presumptive evidence of the presence of some renal damage; in general such a diastolic pressure justifies the diagnosis of nephritis.

I have presented these figures, not as proof, but rather as an illustration of abundantly proven facts. The studies of nephritis, anatomical and clinical of the past two decades have developed three important facts which are at variance with our previously accepted opinions. These new ideas are concerned chiefly with the relationship of the clinical to the anatomical changes and with the connection between hypertension and nephritis. In 1901 Osler used these words: "In a patient with increased pulse tension (particularly if the vessel wall is sclerotic) with the apex beat of the heart dislocated to the left, the second aortic sound ringing and accentuated, the urine

abundant and of low specific gravity, with a trace of albumin and an occasional hyaline or granular cast, the diagnosis of interstitial nephritis may be made safely. Of all the indications, that offered by the pulse is most important. Persistent high tension with thickening of the arterial wall in a man under fifty means that serious mischief has already taken place, that cardio-vascular changes are certainly, and renal most probably present." Our interest in this statement of this wonderfully keen clinician lies in the last two sentences: in the first of the two we find one great reason why a whole generation of physicians has associated hypertension and nephritis as necessarily interdependent; in the second, however, we get a foreshadowing of the most recent teaching on the subject. The clinical use of apparatus for the determination of the blood pressure, which became general about the time of these utterances of Osler, helped to fasten upon our generation the view that hypertension meant nephritis; leading clinicians expressed the opinion that in every case of hypertension the kidneys were diseased. If we refer to the standard text-book of Edwards, we find included in the definition of chronic interstitial nephritis these words: "Characterized clinically by abundant urine, and by marked cardiac hypertrophy, arteriosclerosis, hypertension, retinitis and uremia." And under diagnosis we find that "there are three cardinal findings, cardiovascular, urinary and retinal." The emphasis laid upon the hypertension in cases of so-called chronic interstitial nephritis led to the widespread belief that hypertension meant nephritis; practically such text-book statements as have been quoted were reversed; instead of emphasizing nephritis as a common cause of hypertension, common opinion accepted the symptom "hypertension" as invariably diagnostic of nephritis.

Our modern variations of these older opinions may be expressed thus: (1), the anatomical classifications of renal disease so long accepted and taught do not conform to the facts of clinical medicine; clinically, cases of nephritis as they occur often defy classification according to those anatomical systems. The pathologists have shown us that the attempt to make clinical use of these older classifications leads to failure so often as to make "confusion worse confounded"; (2), our present conceptions of chronic parenchymatous nephritis are especially unsatisfactory, but with this subject we are not concerned today; (3), chronic interstitial nephritis is no longer an acceptable term; we must separate two main groups of our hypertensive cases, one in which the hypertension is associated with definite evidence of kidney disease and another in which the symptoms and findings characteristic of renal damage do not occur. Moschcowitz goes so far as to say, "The vast majority of disorders associated with persistent hypertension begin as 'essential' hypertension. If untreated such essential hypertension lead to the

clinical concepts of arteriosclerotic, nephritic and other hypertensions"; (4), added accuracy may be given to diagnosis and more rational therapy may be promoted if we direct our attention more particularly to the physiology and pathological physiology of the kidney, in other words, if we study renal function and base our diagnosis and treatment upon the evidence of impairment of one or more of the normal activities of the kidney.

Some years ago Volhard and Fahr proposed a new classification of the diseases of the kidneys; the complete classification will not engage our attention here, but I do desire to call your attention to the grouping which they proposed for the cases of hypertension, with and without nephritis. They recognized three types of cases which are characterized by hypertension, (1), diffuse glomerulonephritis of inflammatory origin; (2), benign sclerosis characterized by the presence of hypertension without the evidence of renal insufficiency; (3), combined sclerosis (malignant) including those cases of hypertension (not of inflammatory origin) with renal insufficiency. This classification is very satisfactory and corresponds very well to our present conceptions of renal pathology. We find here due emphasis laid upon the occurrence of nephritis with hypertension, whether the nephritis be of inflammatory or of degenerative origin. Indeed, the very fact that nephritis is so frequently accompanied by hypertension is the chief reason for our present confusion about the relationship of the two conditions. We have all met many cases of nephritis of the inflammatory type with hypertension and have been particularly impressed with the cases which we meet occasionally in young people or in those of early middle life, with a marked rise of the blood pressure and all the evidences of an advanced nephritis. We know the utterly hopeless prognosis and more than once we have seen these patients for the first time when uremia was impending or even present. Many years ago, Bradford pointed out the tendency of these cases to run a latent course and to present themselves to the physician only with the development of symptoms which mean the onset of the terminal stage. Furthermore, Volhard and Fahr recognize the possible and not infrequent connection of the benign and malignant types of the sclerosis, the occasional transition of the benign to the malignant; the two types are separable only on the basis of renal function. The complete classification, however, is sufficiently complex to partially defeat its own purpose; some new terms have been introduced which confuse rather than elucidate. Various modifications of this classification have been proposed. The classification proposed by Christian has met perhaps, the widest approval. As to the cases of hypertension, he recognizes three groups, in addition to the arteriosclerotic group which may or may not be associated with an increased arterial tension. These are, chronic nephritis with hypertension,

chronic mixed nephritis (nephritis with hypertension and edema) and essential hypertension. If the classifications were confined to the cases with hypertension, my preference would be for the classification of Volhard and Fahr; this scheme conforms so nicely to the facts both anatomical and clinical.

Hypertension, therefore, is not merely a symptom of nephritis; it occurs in various conditions. We find an increase of the blood pressure in gout, lead poisoning, hyperthyroidism, neurocirculatory asthenia, various cerebral diseases, perhaps in various other conditions. But we wish to emphasize particularly the existence of a large group of hypertensive cases without the signs of nephritis or other toxemia, in which the rise of blood pressure is persistent and of long duration; in which, in fact, the hypertension is often accidentally discovered and for which there is no discoverable cause. Symptoms which do appear are apt to be cardiac or vascular rather than nephritic. This is the condition to which the name "essential hypertension" has been applied.

This great group of essential high pressure cases has thus far defied explanation. If nephritis were the only disease associated with hypertension the problem of the origin of high blood pressure would be to discover that toxic substance which being retained because of renal disease, might show blood pressure raising properties. Indeed, Koessler has suggested that eclampsia, the one acute toxemia known to us in which the blood pressure rises with the onset of symptoms (perhaps before) and subsides as the patient recovers, is the most inviting field for study of the problem of the pathogenesis of hypertension. At present the theory most widely accepted as an explanation for the degenerative types of hypertension is essentially that proposed by Gull and Sutton in the early seventies. According to this theory the primary disease is a disease of the blood vessels (the smaller arteries); Allbutt refers to this change as arterio-capillary fibrosis. Mott in Allbutt's System refers to their theory thus: "They proved that the red granular contracted kidney of chronic Bright's disease is but a part of a general vascular disease, and their observations were most valuable in demonstrating that what was looked upon as a disease of a single organ was, in reality, a widespread vascular change throughout the body secondary to some other process which we now recognize as probably due to defective metabolism. Lancereaux came to the same conclusion although under his title of Herpetism his views and observations did not receive in this country the recognition they deserve." * * * "In the prodromal stage of the disease a spasm of the arterioles is probably brought about by irritation of toxic products, causing contraction of the muscular coat, increased peripheral resistance, and compensatory increased force of the heart's action, whereupon the arterial pressure

risers." And Janeway in his article on "Nephritic Hypertension" already quoted, says, "In particular the work of Jores, Aschoff and Gaskell shows a return of pathologists to the fundamental idea which Gull and Sutton enunciated—namely, that the real disease back of what we call chronic interstitial nephritis is a disease of the small blood vessels and that the lesions of the kidney are secondary manifestations."

With the development of the disease, the different organs, especially the kidneys and the heart, show the evidences of fibrosis, a degenerative process of variable degree occurs. The heart may be the first organ to show signs of failure or the symptoms may be vascular (rupture of a cerebral vessel) or the renal function may fail because of diffuse local sclerosis. Dependent on the degree of anatomical change which the kidney may undergo we may meet all degrees of renal insufficiency, from the normal function found with some cases of definite or extreme hypertension to the advanced renal damage found in others. The transition from the benign to the malignant assumed by Volhard and Fahr is thus readily understandable. Foster has recently discussed this subject and has criticised this theory of the pathogenesis. He calls attention to the fact that vascular disease does exist without antecedent hypertension, that arteriosclerosis, while it may result from the strain of long continued high pressure, may also be the result of congenital weakness of the vessel walls or of infectious processes. He admits the plausibility of "the idea that strain on the vessel wall is a causal factor in arteriosclerosis," but goes on to say, "The examples of generalized arteriosclerosis with no antecedent hypertension are sufficiently common, so that it cannot be held that all cases of arteriosclerosis are due to increased arterial pressure. It is pertinent then to inquire whether there are cases of arteriosclerosis and granular kidney without hypertension", and goes on to present evidence, "That vascular sclerosis and nephritis of the vascular type can arise without antecedent hypertension." He concludes that "One can find no adequate evidence for belief that hypertension is a predominant factor in the causation of arteriosclerosis. Even though some types of nephritis possibly may be of vascular origin their genesis cannot be traced through arteriosclerosis to hypertension. But while there is no direct interdependence of these organic changes, there are many facts suggestive of the same causative agent producing both organic changes. Our present knowledge seems to indicate in a most general way that organic change in the kidneys and vessels may arise in diverse manners, the least indefinite of these being through intoxication of infectious origin." * * * "In a subject so confused as that of hypertension in its relation to arteriosclerosis and nephritis it is best that our ideas remain fluid rather than crystallized into

conceptions based as they must be at present on assumptions and speculations. We need first of all a large range of clinical facts". At present, indeed the explanations offered to account for the interrelationships of hypertension, arteriosclerosis and nephritis are based very largely on speculation; to the practicing physician the danger lies in the acceptance of these speculations as facts and the consequent attempt to apply them to his daily practice. It is well to bear in mind that the theories offered to account for the presence of hypertension are theories; we find ourselves on sure ground only as we keep close to the facts. We may assert, (1), nephritis is a common cause of hypertension; (2), there exists a large number of cases with persistent hypertension in which we can demonstrate no nephritis, clinically nor anatomically.

It is only fair to mention here that Romberg, in the most recent edition of his book, in discussing hypertension of long duration, expresses the opinion which he has formerly held that, "Renal disease is the cause of hypertension. So far I know of no case of permanent hypertension, carefully examined according to present day standards, in which renal disease was not present. Thus I cannot agree with the very plausible view expressed by eminent investigators, according to which the kidney disease is only a partial phenomenon of a change in the blood vessels leading to hypertension."

Has this changed view point any clinical significance for us? Does it offer help to us in our management of these cases? We may answer these questions in the affirmative and say that from the standpoints of prognosis and treatment, the classification of Volhard and Fahr and kindred classifications have been of real service to us. Given a case of essential hypertension, the outlook is for symptoms of cardiac or vascular disease rather than for those of renal change; ultimately we may expect decompensation, angina pectoris, acute edema of the lungs, cerebral vascular change (hemorrhage) or peripheral vascular disease. With those types of hypertension associated with renal disease, uremia is common though cardiac decompensation may occur. Applied to treatment our newer views may be expressed thus: In essential hypertension, our chief concern is to protect the patient in his daily living from the various insults, physical and mental, which tend to raise the blood pressure; the matter of diet is of less importance though by no means negligible. The main indication is to protect the patient from the wear and tear of exacting business, from undue physical exertion and from nervous or mental strain of any sort. The influence of cold is well known in provoking the cardiac attacks which may be so serious in the course of hypertension or arteriosclerosis; as the condition becomes more advanced, life is undoubtedly prolonged if the patient is so situated as to be able to escape the

rigors of northern winters. The frequent changes of weather conditions have an unfavorable influence in other ways; the minor infections, so common in our winter months, may act to burden the heart because of pulmonary disturbance or may manifestly aggravate the disease by direct effects upon the heart or kidneys. The question of food, though of less importance in the essential cases, is by no means unimportant. The tendency of the patients with hypertension to obesity and to glycosuria has been pretty well established; both of these conditions are associated with over nutrition even if they are not due to it. We are warranted in drawing the conclusion that excessive intake of food is to be deprecated in our cases of hypertension; in very many of these people, a moderate loss of weight is accompanied by a distinct improvement in their general well-being. In general, it is a good plan to put the patient on a diet which will cause some loss of weight. As to the limitation of particular forms of food, the same definite indications are not present here as in renal disease, yet it is not to be forgotten that we are dealing with a general condition from which the kidneys are not excluded and it is good practice to arrange the diet in such a manner that the kidneys may be protected, spared so far as is compatible with the general health and strength of the patient. A large number of these patients are fit to remain at their work for many years and must needs be permitted a diet which will permit a normal amount of activity. Concretely, it may be said: (1), the foods rich in purin bodies may well be forbidden entirely; the end result of their metabolism is uric acid which is one of the first substances to be retained by the insufficient kidney and is likely to prove an irritant to a slightly damaged kidney; these foods include meat extracts (meat soups), liver, sweetbreads, kidneys and brains among the animal foods and peas and beans especially among vegetable foods. In general meats are purin containing, but not to a sufficient extent to warrant their exclusion from the diet of these patients; (2), in line with the statement made above regarding the importance of sparing the kidneys unnecessary work, we believe it to be good practice to accustom the patient to a fairly low protein diet—Newburgh and Squier have produced renal irritation by excessive protein feeding; dependent upon the patient's occupation, and guided by the evidence of renal sufficiency or of its failure, protein food may be allowed in moderate amounts; the purin free foods, eggs, milk and cheese are the forms of protein food which are most desirable; (3), salt may also be restricted; in general too much salt is taken by the ordinary man and these patients with hypertension may well be advised to refrain from the

excessive use of salt, to accustom themselves to less salt than has habitually been taken; (4), constipation must be corrected; (5), in general, water may be taken according to the comfort of the patient. Excessive quantities are to be avoided; excess may more easily be avoided if salt is limited.

Where the hypertension is associated with definite renal damage, the treatment must be directed specifically to the maintenance of renal function. We have no remedy to restore damaged renal tissue; we can only spare the kidney by relieving it of all but the most necessary work and thereby favor repair by promoting rest, or at least favor delay of the progress of the disease. The treatment includes: (1), the limitation of protein and salt to minimum requirements, (the foods rich in purin bodies should be strictly forbidden); (2), the restriction of water in the cases associated with edema whether of renal or cardiac origin; (3), the removal of foci of infection and the protection of the patient from fresh infections. Not long since, Emerson pointed out the frequency of exacerbations of acute nephritis in the course of chronic nephritis and emphasized the connection of these exacerbations with recent infections. At the County Hospital our attention often has been attracted to the rarity of cases which are essentially "acute" nephritis; acute nephritis, as we meet it there, is usually an acute exacerbation of a chronic process and quite regularly has been preceded by a fresh infection, often of minor degree.

Time does not permit me to discuss all the ramifications of treatment, in the cases of essential hypertension including the treatment of the various manifestations of cardiac and vascular disease, in the nephritic group including particularly the treatment of uremia. I must emphasize that here only certain broad differences have been noted; the purpose has been to make plain the fact that in treating patients with hypertension we must differentiate the renal and non-renal cases. Neither have I discussed the use of vaso-dilators nor venesection, both of which subjects invite discussion when this general subject is discussed. The temptation to follow all the leads which the question of hypertension presents is very alluring but must be resisted today. I may say, for my own part, that I have almost entirely given up the use of medicaments for the lowering of the blood pressure except in such conditions as angina where such drugs are used for specific reasons. Venesection, a neglected method of treatment, has its own field in the treatment of those cases with cerebral disturbances due to the changed circulatory conditions in the brain, the vertigo, headache and insomnia of which these people often complain. I cannot help but believe that in certain cases the timely use of venesection does serve to prevent the occurrence of cerebral hemorrhage. With the onset of acute edema of the lungs in the cases of hypertension venesection is imperatively indicated.

LARYNGEAL DIPHTHERIA IN THE
SMALLER COMMUNITIES*BYRON N. LINGEMAN, M. D.
CRAWFORDSVILLE

The management of laryngeal diphtheria in outlying districts is much more difficult than in larger cities. The smaller communities do not have access to a modern contagious hospital with its trained staff of nurses and physicians, consequently the mortality is very high.

There are few physicians outside the contagious hospitals who have had any training in the art of intubation. This is one of the most difficult operations in surgery, as it requires a great deal of practice first upon the cadaver, then upon the living under proper supervision. The only place this training can be received is in a few contagious hospitals, consequently the opportunities for learning are limited. Contagious hospitals should try to give this training to as many as possible. It is probably true that their mortality rate would be higher, but the common good demands that there be more physicians qualified to perform this operation.

In my experience in hospital and general practice the only lives that I really thought I had saved were by intubation. It is true that cases of pneumonia or typhoid fever sometimes recovered, but I always felt that it was through the grace of God that they recovered rather than as a result of my treatment. Intubation is really a spectacular operation. The child is usually in an extreme condition. Its lips and finger nails are blue. Its breathing has been loud and labored for several hours and it is almost exhausted. The parents realize the serious condition of the patient and are hysterical and of little help in the operation. The child is wrapped in a sheet, mummy fashion, the side mouth-gag introduced, and the proper size tube slipped into its larynx. This causes a paroxysm of hoarse coughing, some mucus is expelled, a little brandy helps in this, and then the child begins to breath easier. Its color clears up almost immediately, and it is soon asleep.

The handicap resulting from the lack of proper hospital facilities in the smaller communities is a serious one and until it is removed, diphtheria will continue to take its toll among the precious lives of the children. But in spite of this handicap, it is the writer's belief that a good many lives could be saved through the proper co-operation between the family physician and some one trained to do intubations.

In the first place the family physician should be trained to recognize the disease early. Too often the little tot is treated with syrup of ipecac or stillingia compound until death's pallor tells the physician that antitoxin should have been used instead. He should know that laryngeal

diphtheria and membranous croup are one and the same disease and should be able to differentiate this disease from spasmodic croup. When in doubt he should give antitoxin.

A croupy cough and dyspnea which is both expiratory and inspiratory and which is not relieved by ordinary means and which tends to persist in the day time, should be treated as membranous croup. The first symptoms are usually hoarseness, a croupy cough and heavy and prolonged or wheezy respiration. If there is little pharyngeal involvement, the constitutional symptoms are usually slight. Fever may or may not be present. As the laryngeal stenosis develops, the voice becomes hoarse, whispering or absent; the cough metallic; and the respiration labored. All the accessory muscles of respiration are brought into play. There is marked retraction of the epigastrium and intercostal spaces which is called "pulling." The lips and finger tips become blue. The child has an anxious expression; is restless and tossing.

Please remember that it is possible for a child to have membranous croup and still not have a perceptible membrane in the throat. The membrane may be so slight in the pharynx that it is overlooked. Cultures taken from the pharynx may be of some aid in diagnosis, but the delay in getting reports, that we usually have in the smaller communities, prevents this from being of much practical importance. The disease may occur at the most unexpected time and place, often without known exposure. The child may have a croupy cough and be ambulatory for a few days and then suddenly become dyspneic during the night.

Practically the only treatment that is of any avail is antitoxin. If the dyspnea is not relieved by this and the cyanosis becomes too severe, intubation or tracheotomy will have to be resorted to. Of these operations intubation is the one of choice.

The dosage of antitoxin is an important question. I find that most family physicians do not give large enough doses. The average dose at the Chicago Contagious Hospital for laryngeal diphtheria during the year 1920 was 29,600 units. The average age of the children was from two to five years. Second doses of antitoxin are given at any time without much fear of anaphylaxis. The minimum initial dose should be 10,000 units. In cases having large amount of exudate in the pharynx, larger doses of antitoxin should be given than in the straight laryngeal form. It should be given deep into the muscles in some region not pressed on in lying, such as the front of the thigh or abdomen.

If the family physician suspects that a case might be membranous croup he should first of all administer a dose of antitoxin and if not sufficiently trained himself, call in some one who is trained in order that preparation can be made for immediate intubation if necessary. Everything

*Presented before the Ninth Councilor District, Lebanon, May, 1923.

should be in readiness so there will not be a moment's delay. A sheet with several strong safety pins should be provided. Also a little brandy if possible, and a hypo of camphorated oil or other stimulant. The child should be watched constantly by some one experienced in such cases, and the surgeon called as soon as the cyanosis becomes too severe. It is well to have a tracheotomy set in readiness in case the tube does not relieve the dyspnea.

After the patient is successfully intubated the danger is not over by any means. If it is possible to move the patient to a contagious hospital this of course should be done. If this is impossible perhaps he can be moved to some place more convenient to the surgeon. Needless to say the surgeon should always be within call and ready to go at a moment's notice in case the tube is coughed out or becomes obstructed. A trained nurse should be obtained if at all possible.

The question as to what to feed a child with a tube in his larynx is a difficult one. Liquids are particularly hard to take. They are best taken through a straw with the patient on his side with the body elevated, although they can be taken by some patients in the erect position. Semi-solid foods, such as soft boiled eggs, milk toast, corn starch, ice cream, etc., can usually be taken with the patient sitting up. In addition to the diet, careful nursing, constant observation, plenty of fresh air and sunlight is about all that can be done for the patient.

If everything progresses satisfactorily the tube is removed on the fifth day. If no dyspnea develops within an hour, its re-introduction may not be necessary. The patient should be kept in bed for two or three weeks or even longer if there is any slowness or irregularity of the heart, since heart failure is often a serious complication of diphtheria.

This paper would not be complete without mentioning the great strides that have been made recently in the prevention of this disease. For immediate protection, 500 or 1,000 units of antitoxin furnish immunity for three or four weeks. For immunity lasting three or four years or even longer, toxin-antitoxin injections are of great value provided they are not given during the period of temporary immunity. If toxin-antitoxin injections were used extensively among children under six years of age, it would not be many years until diphtheria would be a thing of the past. The immunity of the individual can be determined easily by the Schick test.

During the past year I was called to see six cases of laryngeal diphtheria in my community. Two cases had died before I arrived and nothing could be done. Three cases were intubated. One of these died four days after intubation from toxemia. The other two survived. One case pulled through by the use of antitoxin alone. I

am satisfied that this mortality of fifty per cent would not have been so high if the diagnosis had been made earlier and antitoxin and intubation used in the cases that died.

My most remarkable case was one I had a short time ago with Dr. Caplinger at Wallace. I saw this baby, which was two years old, on Monday morning and found it in a desperate condition. Ten thousand units of antitoxin were given immediately and intubation performed. Since we were unsuccessful in our efforts to find a place for the children in Crawfordsville, we had to leave it twenty miles in the country, with no one but inexperienced parents to take care of it. It got along very nicely, however, and the tube was removed on the fifth day. After intubation the child was a little croupy, its respiration wheezy, and its voice hoarse for several days, otherwise it was apparently all right.

In conclusion I would again like to call your attention to the following points:

1. Laryngeal diphtheria is one of the most fatal of children's diseases.

2. The mortality is much higher in the smaller communities than in the cities.

3. To reduce the mortality there should be co-operation between the family physician and surgeon.

4. The family physician should learn to make the diagnosis early in order that antitoxin can be given early.

5. There should be in every community of any size a surgeon especially trained to do intubation.

STREPTOCOCCUS HEMOLYTICUS INFECTION OF THE NOSE, ACCESSORY SINUSES AND MASTOID CELLS*

JOHN C. BOONE, M. D.,

SOUTH BEND

During the past three or four years the writer has encountered in his practice five or six cases of streptococcus hemolyticus infection of the nose, accessory sinuses and mastoid cells, apparently not epidemic in type. The following case report will serve to illustrate the same character of infection, but evidently of an epidemic type, which occurred this winter, having certain salient features that distinguish the infection from the ordinary type:

Miss O., aged forty, was taken ill with an apparently mild infection of the nose without fever, with a moderate degree of lassitude, some headache, and sore throat. These symptoms lasted for about one week, when there occurred a moderate rise of temperature, and an intense pharyngitis. The nasal mucosa became swollen sufficiently to occlude the nasal passages, this swelling lasting for a week or two. Frontal, temporal and

* Read before St. Joseph's County Medical Society, May 22, 1923.

occipital pains developed. Examination of the nose revealed a pseudomembranous exudate which however, was readily detached. Soon the infection spread to the accessory sinuses, which became engorged and yielded slight shadowing on transillumination. The skin became tender over the face and scalp, and the pain around the eyes was now very intense. Irrigation of the maxillary sinuses yielded some serum, but not pus. This condition lasted about one week, when intense pain suddenly developed in the left ear. Paracentesis was done, and a culture was made, which showed a pure culture of streptococcus hemolyticus. At no time was there much tenderness to pressure over the mastoid, or any swelling. The ear continued to discharge, but cleared up with daily irrigations within two weeks. The nasal discharge gradually subsided coincidently with the discharge from the ear. X-ray pictures taken at this time showed the sinuses all clear, with very faint shadowing, but perfect outlining of the cells of the mastoid on the left side.

A characteristic feature of this epidemic is the intense degree of prostration, even when the infection is only very mild. In all my cases a constant symptom was intense aching in the sacro-iliac joint.

These cases were all treated by irrigations and have cleared up with the exception of the case reported above, which continues to have a nasal discharge and some tenderness over the left temple and maxilla. Notwithstanding the laboratory findings and the tenderness with pain over the mastoid, none of the cases has come to operation.

The outstanding features in this series of cases are intense prostration, moderate fever, severe head pains mostly over the temples and maxillary region, a constant sacro-iliac joint pain, belated recovery of strength, and finally, on physical examination, intense intumescence with a whitish pseudomembrane. The infection usually attacked each member of the household, as well as neighbors who frequently visited the sick and ministered to them.

The middle ear became involved in most of my cases, and paracentesis had to be done in five out of six of these. The ear complication cleared up within from two days to two weeks.

Dr. A. S. Giordano, Director of the South Bend Laboratory, tells me that in this recent epidemic bacteriologic examination revealed streptococcus hemolyticus in 98 per cent. of the cases of acute sinusitis, mastoiditis, meningitis, and pleuritis. He added, however, that owing to the pressure of work he had been unable to establish any uniformity of strain of this micro-organism by combined serologic and bacteriologic examinations.

CONCLUSIONS

1. Streptococcus hemolyticus has a strong tendency to invade the accessory sinuses and the middle ear.

2. The mastoid cells do not seem to become infected, or else the infection is easily thrown off by them.

3. The sinuses do not, as a rule, go on to pus formation, usually clearing up with the subsidence of the intumescence.

4. The lymphatic system, it seems, takes care of the infection.

5. No operative interference is advisable unless marked swelling and tenderness over the mastoid area occur, when it is best to await delimitation of the infection before incision is made.

DRAINAGE OF THE EYES*

G. W. SPOHN, M.D.

ELKHART

In considering this subject it was deemed best to limit the paper to the pathology and treatment of the punctum, canaliculus, lacrimal sac and nasal duct. The puncta are on the nasal side of the eye; there is an upper and a lower, but as the lower is the more frequently diseased it will be considered unless otherwise mentioned. There are congenital diseases, but the acquired only will be considered.

The lacrimal glands secrete the tears which, with the mucus, lubricate the eyeball. The punctum, canaliculus, lacrimal sac and the nasal duct form the canal through which the lubricant passes into the nose. The canaliculus extends from the punctum to the lacrimal sac, which is situated in a recess of the nasal bone. The nasal canal extends from the sac to the nose, coming out below the lower turbinate bone. The drainage canal only, extending from the punctum to the nose, will be considered in this discussion.

The punctum should be so close to the eye-ball that fluids will be drained easily into the drainage canal. The slitting of the canaliculus often will interfere with the drainage because it throws the punctum too far from the eye-ball. The rules of physics should be applied to drainage of the eyes the same as they are applied to drainage of land. Any pathology of the drainage canal, any interference with the free capillary attraction, or any stoppage in the duct will interfere with the free flow of tears to the nose. A foreign body in the drainage canal is not an unusual occurrence, but if there is no foreign body in the canal, and there is an excessive flow of tears, there must be a stoppage in some part of the drainage system. The narrowest place is where the lacrimal sac enters the nasal duct. At this place there is more trouble than in any other part of the drainage canal.

A patient will notice an excessive flow of tears more frequently than any other symptom. Patients complain especially when exposed to severe cold. This form of epiphora is easily cured—that is when there are no other causes than the

(*) Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the Muncie session, September, 1922.

cold. A dilation of the punctum and an accurate refraction generally will stop the excessive watering of the eye.

It is a common occurrence to find an epiphora in cases of uncorrected hypermetropia of long standing. It is clear that to see with an eye too short, as in hypermetropia, the patient must focus, and in order to do this he must lengthen the eye. This will put a strain upon the eye, causing conjunctivitis, photophobia, styes, chalazions, etc., resulting in a narrowing of the punctum. Such a pathology will stimulate the lacrimal glands, causing a free flow of tears. This naturally will cause a pinched state of the muscles of the eye. Unless the condition is corrected, the tears will become semi-mucous, and later muco-purulent. When the patient is out in the open air, or the cold, there is a still greater contraction of the punctum. All might have been corrected by wearing the proper glasses. It is difficult for a patient to understand why he should wear glasses when he can see so well, when he can see better without than with glasses, and when he can read below normal on the chart. Patients are not supposed to understand the physics of the eye, yet many of them insist on being the judge as to whether they need glasses. To tell patients that there are only about twelve out of one hundred who are born with normal eyes will inform them along lines that at least will make them think; and to tell them that their eyes are one of the eighty-eight born abnormally may make them yield the point. To tell them that glasses will cause a relaxation of the muscles of the eyes, that the wearing of glasses will prevent the overstimulation of the lacrimal glands, and after opening the punctum, there can be no more overflowing of tears, will help.

The need of wearing glasses cannot be emphasized too much. It is not wrong to wear them. It is not fashionable, and generally will not improve the appearance, and to say that glasses are worn for the sake of appearances, or because it is fashionable, is telling an untruth. No one will wear glasses unless he is benefited physically. The wearing of glasses may be recognizing a physical defect, or an inheritance, but it is aiming at intellectual perfection. If the whole subject of the need of glasses could be explained to patients and the family physicians, would it not be beneficial to our patients? Every oculist knows that practically all persons would do better if they would wear glasses. The lack of glasses will cause many diseases of the eyes. It is often hard to stem the tide when the family physician is against you. If a physician does not understand a subject he should refrain from giving advice. The family physician frequently is consulted on questions that do not concern his work; but would it not be wise to be honest with the patients and tell them that he is not able to give advice upon the subject?

Fox says, "There is an element of eye strain in practically every case of improper drainage of the eye." The wearing of glasses will not only stop the tension and overcome the diseases due to eye strain, but it will prevent the lodgement of dust or any foreign bodies in the eyes. It is a protection to the eyes that cannot be had in any other way. It is true that in some cases it may modify the appearances, but as long as it corrects a physical defect it tends towards the normal, and this is the desideratum sought.

As has been said, the narrowest place in the drainage canal is where the sac enters the nasal canal. At this place there are more strictures than at any other place. The etiology of epiphora is more frequently at this place. The examination of the nose and the drainage canal will reveal the location of the stoppage of the tears. It is more frequently due to some trouble in the nose. To treat the nose will give only temporary relief, but patients often expect relief in a short time of a trouble that has existed for many years. Palliative treatments should be used at first, because patients expect this, and because the patient needs education along the line of proper care and attention. Eventually, if necessary, a submucous dissection of the septum should be done or a portion of the lower turbinate bone should be removed. If there is a stricture in the punctum, the canaliculus, the lacrimal sac or the nasal duct, it should be removed. In many cases the etiology is not of so much importance if the obstruction is removed. If the patient wears the proper glasses, if the punctum is open and in juxtaposition to the mucosa, and if the sac and nasal duct are open and free, there can be no epiphora or closure of the drainage canal.

I always have felt safer to pass first a No. 1 or No. 2 Bowman's, then increase the size as the duration is increased. If the probe is sterilized, the canal anesthetized, and following the passing of the probe the canal is irrigated with a 25 percent solution of argyrol or its equal, there will be no pain nor bad results. If the drainage canal is acutely inflamed it can be controlled easily with hot water or any antifebrile treatment.

In some of our large clinics the old habit of passing large probes in all cases is still practiced. In an examination of 150 skulls I found about 10 per cent that had extremely small openings through the nasal bone. A filiform or a No. 1 might be passed, but a No. 6 Bowman's would denude the mucous membrane and give great pain to the patient. The habit of passing probes in all cases, whether the bony canal is large or small, should be discouraged. It is possible to tell, by passing the finger over the nasal duct, how large the lumen is. A differential diagnosis should be made before passing a probe. The passing of probes in every case is on a par with politzerizing the middle ear in all middle ear troubles. Both are often practiced, spectacularly, to the

envy of the attending physician, but with no benefits to the patient. The rules laid down in our books on physics, mixed with good common sense, will overcome most cases of stenosis of the occluded eye drainage as well as the symptomatology of the middle ear.

The passing of probes usually is divided into the quick and the slow dilation of the drainage canal. The dilation of the nasal canal is equal to the dilation of the urethra or any tube in the human anatomy. In many cases, if the etiology is removed before dilation good results are achieved. A dacryocystitis, either chronic or acute, is repugnant to the patient and the observer, yet it is often considered trivial; but if erysipelas follows and the fever rises with delirium, the patient and friends become alarmed. However, the symptoms are not more alarming than previously. Some oculists report good results from slow dilation, some report good results from rapid dilation; both report good percentages of recoveries. Personally, I have had better results from slow probing in cases explained, but in chronic dacryocystitis nothing has been satisfactory but surgery.

The submucous resection of the outer wall of the nose has its advocates, with Dr. Yankauer of New York as its champion. It is claimed that this is by far the most reasonable method, and furnishes the most physiological cures. Some nose and throat men who are not eye men advocate that which comes in their line. Is it not possible for physicians, in their enthusiasm to cure diseases, to step beyond their sphere and practice a line of work that should be handled, to the better advantage of the patients, by physicians in other specialties? Though I never have resected the outer nasal wall, yet it seems to be easy; but why subject a patient to unnecessary risks when some tried method will give results? But few patients in private practice will yield to the demands of the physician.

The removal of the lacrimal sac is a simple procedure—with no risk to run, and generally reliable. It is true there are some who claim it is a very difficult operation, but in reality it is very simple. Besides, the percentages of recovery are as high or higher than any other. To me it is the operation of choice when an operation is necessary. It has been said that the removal of the sac interferes with the proper drainage of the eyes; but not so, because experience has shown that if the lacrimal sac is removed the lacrimal glands soon will adjust themselves to the situation. For four or six weeks there may be an excessive flow of tears, because of the stimulation of the glands, but it soon will adjust itself. Should there be a continued, excessive flow of tears, the small or lower part of the lacrimal gland should be removed. Perhaps I have not had as extensive an experience as you physicians, but all my cases from which the sac has been removed

are doing well and the results are satisfactory to the patients.

A probe passed from the punctum down into the nose should come out on the inside of the lower turbinate bone. The upper ends of the two probes, passed into the puncta, will touch or cross each other as the probes will be at an angle of 30 or 45 degrees. Some of the canals through the bones are small, others large, as has been said. Fuchs says, "The lacrimal duct cannot be distended". This might be modified. Cases with a large bony canal and a slight congestion of the mucosa, or even with slight strictures at the junction of the sac and the nasal canal, can be cured by the passing of probes. If a No. 1 Bowman's probe is passed repeatedly, and as the periods increase the size is increased to a No. 6, a cure can be accomplished.

If there is a complete occlusion of the nasal duct, if the lacrimal sac has been abscessed, or if there is a deformity of the nose, the passing of probes will give only temporary relief. If the cause of the epiphora is in the nose it should be righted. An old dacryocystitis will rarely be cured by relieving the cause. All such cases should have the lacrimal sac extirpated. Most of the books or literature upon the subject mention some cure for the pathology. Because another advocated some remedy should not bar anyone from using it.

In a previous part of the paper I stated that the extirpation of the sac is a simple operation. The saying that it should be practiced in selected cases only is not true. Nothing grave can come from an attempt to do the operation. Of course I advocate complete anesthesia with procain and epinephrin. If one cuts down to the sac, or even into the sac, nothing grave can come from it. If one extirpates the sac, curettes the canal, and, best of all, thoroughly cauterizes the canal with pure tincture of iodine, the results will be good. Even if a small portion of the sac is allowed to remain, the iodine will destroy all pyogenic membranes and bacteria. One or two sutures, with compresses, will complete the operation. If the nasal trouble was corrected before, my results have been universally good.

CONCLUSIONS

I have advocated the removal of the cause and the passing of probes in the milder cases, and the extirpation of the sac in graver or chronic cases. How can a differential diagnosis be made—to know which to probe and from which to extirpate the sac? The history will give the duration; the sense of touch will give the size of the opening of the bony canal; and the clinical symptoms will give the chronicity and whether it has been abscessed at any time. All old or acute cases of dacryocystitis should be operated. It is only temporizing to treat them, either with or without passing probes. Even in passing probes,

the drainage canal should be anesthetized before attempting to pass a probe. If this is doubted, allow someone to pass a probe into your punctum and it will convince even the most skeptical that it is very painful.

DISCUSSION

DR. C. N. HOWARD (Warsaw): Errors of refraction (through congestion and increased secretion) may augment the difficulties where there is imperfect eye drainage. Let us also not forget zinc sulphate in chronic conjunctivitis.

In attempting to overcome infection in the drainage system, I like the idea of injecting a 25 percent solution of argyrol by way of the puncta.

The nose should be examined. Sometimes one will find the entire trouble at that end of the eye drainage system.

I do not have much faith in the permanent value of probes, although of course we all use them at times. I have gotten good results by removing the sac in those cases of chronic dacryocystitis that do not respond to treatment.

DR. D. O. KEARBY (Indianapolis): I would like some information from Doctor Spohn and Doctor Howard, not from the standpoint of the eye, but from the point of view of the nose and throat. They both stated that the condition of dacryocystitis is of nasal origin. I would like to know from statistics how much of this condition originates in the nose. Are the majority of cases due to nose conditions, or are most of them due to extranasal infection?

In the discussion of the endonasal operation yesterday reference was made to the importance of doing work on the cadaver. I have never done any of these operations on the living, but I have on the cadaver. I have studied probably fifteen or twenty cadavers, having spent some time in Boston last spring with Doctor Mosher, during which time I saw all the specimens he had at the Harvard Medical College. Next to the lacrimal bone we have the anterior ethmoid cell. The nomenclature of these cells is varied, but the best name for that particular cell that lies against the lacrimal sac is the lacrimal cell, as designated by Barnhill. I have often wondered if a majority of cases of chronic dacryocystitis are not due to infection in this particular part of the anterior ethmoid group, especially the lacrimal cell.

DR. W. F. HUGHES (Indianapolis): The present drift of opinion is toward the intranasal operation, and the old-fashioned extirpation of the sac is being held up to scorn. But I am not yet satisfied that the intranasal route is the proper one, and I have serious doubts whether anything like a majority of cases are due to intranasal conditions. We must remember that the lacrimo-nasal duct empties under the lower turbinate. From what I know about nose diseases, this por-

tion of the nose is least apt to be infected. I have removed a good many sacs externally and I have never detected necrosed bone. It seems to me that we must consider the lacrimal sac the doctor spoke of as a causal agent. I am convinced that the vast majority of cases of dacryocystitis are due to a condition in the canaliculi, the sac itself, or the lacrimo-nasal duct, and not to a nasal origin strictly speaking.

As to the scar, yesterday it was said that a scar was a frightful looking thing; but I must confess that in my operations the scar is scarcely ever noticed. One is able to make the incision along the natural lines of the face and the scar has not attracted attention.

I have had only one case which complained of epiphora for a few weeks. The theory has been advanced by the leading oculists and authorities on this subject that the irritation in the sac itself keeps up the increased activity of the lacrimal gland, that with the removal of the sac and of all infection and irritation in that part, there is a reduction in the activity of the lacrimal gland. From my experience I am satisfied that is true. I had one case, however, where the lacrimation continued for a year and a half. I was getting ready to remove a part of the gland when the patient finally decided the lacrimation did not amount to much.

DR. ALBERT E. BULSON, JR. (Fort Wayne): I heard Doctor Spohn make the statement yesterday, and he repeated it today, concerning the stopping of epiphora by the wearing of glasses. I think that may be true in those cases in which epiphora is produced by irritation from an error of refraction. It is not true as a general proposition. We must take into consideration the fact that the lacrimal gland excretes excess tears as a result of irritation produced by mechanical, psychic or pathological causes. Under normal conditions the tears excreted are only sufficient to keep the cornea moist. In a room of ordinary temperature evaporation will take care of the tears whether or not there is any drainage into the nose. Glasses will correct no epiphora except that produced by an uncorrected error of refraction. Epiphora due to psychic causes will have to be cured by psychic means. If due to trauma or dust, glasses will help to a certain extent. When it comes to obstruction of the lacrimal drainage, each case must be decided on its own merits.

Yesterday we heard an excellent paper on intranasal operation for the relief of obstructed lacrimal drainage. I have run the gamut of all various treatments of dacryocystitis, including probing and syringing, and doubtless many of my patients are alive to regret this. Perhaps many of you have had the same experience, but it strikes me that before we try the endonasal operation we should resort to the procedure recommended by Doctor Spohn, namely, the cautious

use of the probe, remembering that even cilia can produce epiphora for some time when lodged in a canaliculus and the removal of it cures the epiphora. If these milder measures do not succeed, it is time to consider the advisability of operating for the removal of the sac, or establishing drainage by the endonasal method.

I have seen some excellent results from the removal of the sac. On the other hand, I have seen some bad results, not alone from the standpoint of scar, but the epiphora still continued, and I have seen some dacryocystitis due to failure to get out all of the sac. I have seen cases of ectropion due to the epiphora and irritation produced thereby, and it was an objectionable feature which was relieved by doing the endonasal operation successfully. Some of these endonasal operations are not successful, any more than the removal of the sac, but you have attempted the establishment of physiological function, and removal of the sac does not establish that physiological function.

I want to make a plea for a more general use of the endonasal operation for the cure of these conditions. I do not care whether you do the West, the Weiner or the Yankauer operation, but try some one of them which will seem to be best, and you will be satisfied with the results you will obtain thereby.

DR. HARRY BOYD-SNEE (South Bend): I cannot let the discussion close without going on record as opposed to the essayist's opinion of the operation we designate lacrimal sac extirpation. From what he has said you may be led to believe it is easy of accomplishment by the use of a curette and the application of iodine. I am altogether ignorant of that method of operating to obtain the result. My experience has impressed on my mind the idea that total excision of the lacrimal sac is a very difficult and delicate operation and the result is assured only after the most painstaking and careful dissection, and we can feel safe only after recovering the sac absolutely intact with canaliculi attached.

Doctor Hughes called attention to the fact that he had never encountered apparent necrosis when doing an excision of the tear sac. In my experience I have met a number of cases where, after freeing the sac from the lacrimal groove, an osteitis was discernible, and in several instances it was found in direct connection with a pus-filled ethmoid cell in relation with the lacrimal bone, such as Doctor Kearby has pointed out to you. In this connection it occurs to me that it is not improbable that some of the failures and disastrous results which have attended operations for lacrimal sac excision have arisen through the operator's omission to direct his attention to excluding possible bone involvement before closing the wound.

DR. G. W. SPOHN (closing): I am willing to stand by everything I said in my paper. I have never had any bad results, but if I had I would have the backbone to say so. I may say that I do not do much eye work; two-thirds of my work, possibly more, is confined to the nose and throat.

As to the operation described by Doctor Chamberlin yesterday, I would hesitate to do it and would rather perform the Yankauer operation. I do not think either of them is hard to do.

To say that the extirpation of the sac leaves a bad scar is not true if the operation is done carefully. An incision can be made at an angle that will not produce a scar. The lacrimal gland will take care of itself in a short time.

If you have an error of refraction, or any pathological condition of the eye, the condition will stimulate the lacrimal glands and an excessive flow of tears will follow. Also all pathology in the nose should be corrected first. Many of the cases of dacryocystitis are due to some pathological condition in the nose.

I agree with Doctor Howard that if the physics of these cases are understood it will not be difficult to operate upon them, and the operations are usually simple. It is unsurgical to leave any portion of the pyogenic membrane, yet iodine will destroy any bacteria left.

CARDIAC DISORDERS ACCOMPANYING EXOPHTHALMIC GOITER

The current theories of the cause of the cardiac disorders that accompany exophthalmic goiter are considered by Ernst P. Boas, New York (*Journal A. M. A.*, June 9, 1923), to be inadequate. Evidence is presented that two mechanical factors may play a part in overloading the heart in exophthalmic goiter, thus making it more susceptible to secondary noxious influences. 1. The tremendous dilatation of the arteries and veins of the thyroid short-circuit the blood flowing to the neck and increase the load on the heart in the same manner as do arteriovenous aneurysms. 2. The heightened oxygen consumption causes an increased minute volume flow of the blood, which may be from 25 to

60 per cent. greater than normal. The increased work thus thrown on the heart is the chief cause for cardiac dilatation, hypertrophy and insufficiency in exophthalmic goiter.

THE DANGER OF LIQUID PETROLATUM IN PARENTERAL INJECTIONS

Fred D. Weidman, Philadelphia (*Journal A. M. A.*, June 16, 1923), reviews the dangers of using liquid petrolatum as a base for these injections and urges the substitution of olive oil. Liquid petrolatum is capable of producing important and permanent disfigurement which may necessitate surgical intervention.

**THE JOURNAL
OF THE
INDIANA STATE MEDICAL ASSOCIATION**

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

Office of Publication, 406 W. Berry St., Ft. Wayne, Ind.

AUGUST 15, 1923

EDITORIALS

INSULIN

From the time of the experiments of von Mering and Minkowski in which they established the important relation between the pancreas and diabetes mellitus, it has been the hope of the medical world that some practical therapeutic advance in the treatment of this disease might result therefrom. Progress toward this end has been marked by a number of important experimental efforts, such as that of Banting and Best, who demonstrated that it was the internal secretion of the pancreas with which we are concerned in considering diabetes, and who subsequently prepared an extract of the islands of Langerhans containing this internal secretion, suitable for animal injection. Later with the aid of Collip they were enabled to prepare an extract pure enough for use in man, and the name "insulin" was given the active principle of this extract. Through work carried on in the physiologic laboratory of the University of Toronto it was shown that insulin, amongst its other properties, definitely lowered blood sugar, increased sugar consumption, and caused glycogen to be deposited in the liver.

Since diabetes mellitus is a disease characterized by a lessened production of the active principle of the islands of Langerhans—namely insulin—the problem of its treatment by an artificially prepared insulin seems simple at first glance. It must be borne in mind, however, that such function as the islands are still exercising must be conserved if the increasing severity of the disease is to be arrested. Hence dietetic treatment remains as essential as before the discovery of insulin and its practical production on a large scale.

The purpose of dieting the diabetic is *rest*—that is, by restricting the diet generally (under-nutrition) and especially the carbohydrates and fats to lessen the demand made upon the function of the islands, and at the same time to lessen the risk of acidosis consequent upon an incomplete combustion of fat. The unaided dietetic treatment results in a loss of weight and strength and an ever increasing unwillingness upon the part of the patient to adhere to the dietary given him. The use of insulin by increasing the diabetic's power to oxidize glycogen, and consequently to

carry on normal fat and protein metabolism, makes it possible to give him a well balanced palatable diet adequate to maintain his weight and to carry on moderate exercise. This obviates the greatest difficulty in the management of these cases, i.e., the control of the patient.

The administration of insulin is not unattended by danger—overdosage resulting in a fall of the blood sugar below the normal level and manifesting itself clinically by extreme weakness, pallor (or flushing), tremulousness, sometimes mental disturbances and unconsciousness. It follows that its use should be carefully checked by laboratory procedure and preceded by the most painstaking care in the determination of the patient's tolerance and the degree of glycosuria upon a "basal diet". Fortunately the symptoms of overdosage while distressing and alarming are readily controlled by the immediate ingestion of glucose.

The "Insulin Committee" of the University of Toronto says that insulin is not indicated in about 75% of the cases of diabetes, that is in these patients who remain aglycosuric on a diet adequate to meet the demands of ordinary life. The committee further emphasizes the tremendous value of insulin in the treatment of acidosis and coma, and in preparation of the diabetic for surgical procedures. Its general use is limited most by the mode of administration (subcutaneous) and the absolute necessity for adequate laboratory facilities.

That the discovery of insulin and its manufacture upon a large scale mark one of the great advances in internal medicine in a decade cannot be gainsaid, and it is fervently to be hoped that its indiscriminate and unwise use may not militate against its greatest usefulness.

M. F. P. Jr.

**THE SAN FRANCISCO SESSION OF THE
A. M. A.**

THIS year's session of the American Medical Association held at San Francisco was the most successful session ever held on the Pacific slope and in many ways it was an improvement over any other session of the Association. Eight years ago the Association met in San Francisco, and at that time the registration was almost 1500 less than it was this year. As was to be expected, out of a registration of nearly four thousand this year, over half came from the Pacific slope, California alone registering 1914 members.

For the first time in its history, the activities of the Association all were confined to one building, the Civic Auditorium, with ample room for exhibits, general meetings, meetings of all the sections, and special rooms for committees. This arrangement proved to be a distinct advantage, for it not only enabled the members to shift around in the sections to hear papers in which they were especially interested, but it enabled

them to get better acquainted with the exhibits which are always an entertaining and instructive feature of annual sessions.

All of the sections presented excellent programs and the character of the work of practically all of the sections was what might be called advanced in character from the fact that all of the newer methods of diagnosis and treatment were presented.

The scientific exhibit was unusually good, and all of the demonstrations, including the moving picture exhibit, were well attended. The exhibits from the Western institutions of learning were especially noteworthy.

The social features were equal to anything that has gone before and carried out with the lavish hospitality for which the Pacific slope is noted.

The clinics before and after the session, held at various places throughout the entire Pacific Coast, and even in many of the Western States, especially Denver, attracted a large attendance from members who made the Western trip more extended than would be required in order to attend the San Francisco Session.

The weather throughout the entire week was delightful, and while every one in nearly all points in the East was sweltering with the heat, those attending the San Francisco session were enjoying the delightful weather of the Pacific slope.

The election of Dr. W. A. Pusey, of Chicago, as president of the Association met with universal approval, as also the selection of Chicago as the place of meeting for 1924. It is particularly fitting that the Association should meet next year at its home in Chicago as at that time it will be possible to dedicate the greatly enlarged building of the Association.

THE NEED OF MEDICAL ETHICS

The American Medical Association, in an endeavor to learn how it can be of more service to its members and fellows, sent out numerous queries to the various component societies and to many individual members thereof. The answers are entertaining, but a striking feature of practically all of the answers is the unanimity of opinion that doctors should put forth more effort to stand together. Loyalty to each other seems to be strangely lacking in the medical profession. As one correspondent says, "over fifty percent. of the malpractice suits are due to jealousies and factional fights among members of the profession. Probably forty-five percent. of the remainder of the suits are due to loose talk and criticism of treatment given patients, of which the physician offering the criticism has no knowledge whatever aside from hearsay."

It is strange indeed how gleefully and without justifiable cause except unwarranted jealousy any number of physicians will look upon professional

troubles of a fellow practitioner, and how often a physician's reputation with the public is unjustifiably injured by the criticism of confreres or, perhaps more often, by the look, the gesture, or the mere silence which speaks louder than words. As one doctor says who experienced the taste of what professional jealousies can accomplish, "Brotherly love and professional ethics? There ain't no such animals!" We do a lot of talking about sticking together, but we get little further than talking. Why not try to turn the current by giving more teaching on ethics to our medical students, and more often disciplining the members of our medical societies. Incidentally perhaps we ought to say that what we need is merely common honesty and a fair deal for each of our confreres. That would be ethics enough.

SOME PROBLEMS IN MEDICAL EDUCATION AND PRACTICE.

The American Medical Association Council on Medical Education and Hospitals made a comprehensive report at the San Francisco session and presented some interesting conclusions concerning some of the problems of medical practice. For instance, the report states that general practitioners should constitute the great majority of physicians, as they will be called on to care for patients representing all varieties of diseases and injuries, and that specialists should be in the minority. Reliable estimates are that from eighty to ninety percent. of all cases of illness can be cared for properly by well qualified and resourceful general practitioners. These general practitioners should have the advantage of modern training, which according to present methods is far more than that given even five years ago and is infinitely superior to training before that date. At present all of the recognized schools of learning in the metropolitan centers give graduate instruction, and it is possible for any general practitioner to find courses that will suit both his time and his convenience and upon any subjects that he desires to review. This is especially true with reference to the courses on diagnosis and treatment.

Concerning the specialists the report says that while there is a legitimate and important field for properly trained specialists, the need of them should not be over emphasized. The trouble at the present time is that many physicians are posing as specialists without first having obtained the essential training. This is true in connection with the surgical specialties, and especially true in eye, ear, nose and throat practice where many men with but little education in these special lines, and with far less training, open offices and hold themselves out as specialists.

Another feature of the report that is worth mention in this period of craze for hospital service is the statement that a reliable estimate shows

that over ninety percent. of all patients can be cared for efficiently in their homes or in the physician's office without the need of the hospital. The report might have added that if ninety percent. of all patients are to be cared for efficiently in their homes without the need of the hospital, it will be necessary to have a greater number of nurses than we have at the present time, and there will have to be a greater number of nurses who are willing to go into the homes at a wage that can be met by the average family. This will mean that the graduate nurse, with her college degree and her four years of nursing training which justifies the large salary she now is demanding, will be relegated to the well-to-do families who are able to pay for the services. The great mass of people in ordinary circumstances, who make up the bulk of patients who are ill, must be served by practical nurses who though having less education and less training will be able to serve efficiently in the average case and at moderate compensation.

The difficulty of providing medical care for rural communities is still one of the problems of medical practice, and the Council recommends that any community that can support a physician can get one if its citizens are willing to pledge themselves, under guarantee, an income of twenty-five hundred to three thousand dollars a year, and to interest the community in a physician's support. This plan has worked out satisfactorily in a Middle West community where the physician selected secured from his practice more than the amount pledged, so that the guarantors have not been called on to pay out any money. The points in favor of this plan are: (a) That the people of the community have a voice in the selection of their physician, and (b) the fact that they have pledged themselves to his support will induce them to patronize him so far as is possible and not go to physicians in distant cities. A third point is that many young physicians are short of funds at the time they complete their medical training and will be attracted to places where some reasonable income is guaranteed. In New Hampshire a law has been enacted which permits any town to appropriate enough funds to support a resident physician when the town can not otherwise obtain one.

The Council condemns the granting of certificates or diplomas for unreasonably short periods of study and emphatically states that it is fundamentally wrong to grant diploma-like certificates, which may be used for wall display, to any except those who are known to be proficient in the particular field mentioned in the certificate. These certificates covering short periods of study are used to deceive the public which can not easily distinguish between such a certificate and a diploma given for merit, and assumes that the physician is thoroughly qualified to practice. This false impression is all the more harmful if the

certificate bears the name of some well known university, or if the name of some special field, as surgery, or ophthalmology, is included in the diploma, or if it bears the legible signatures of men widely known as specialists in any field of medicine or surgery. A diploma or certificate should never be granted to one who is not known to be proficient in that particular field, nor to any one under any circumstances who has not completed at least one academic year in full time study of a single special subject.

The conclusions drawn and the recommendations made in this report are worthy of careful consideration, and it is hoped that much improvement in conditions will result in consequence.

BIG BUSINESS DOES NOT RECOGNIZE CHIROPRACTIC.

California now has a board of chiropractic examiners and a board of osteopathic examiners, both independent of all other boards. These boards were secured through the direct action of the popular vote at the last state election. Sentiment in favor of the chiropractors was created through jail sentences for law breaking chiropractors, and securing much newspaper publicity, bought and paid for out of a fund of over one hundred thousand dollars which the chiropractors and the osteopaths spent in securing recognition.

It is strange indeed that people will consider seriously the demands of a cult that teaches that head lice, syphilis, gonorrhea, tuberculosis, typhoid fever, appendicitis and other diseases can not exist without a displacement of one or more vertebrae and can be cured by replacement. When it comes down to a cold blooded proposition, based on dollars and cents, the general public might take cognizance of the fact that life insurance companies are not recognizing chiropractic or accepting chiropractic opinion in accident or life insurance risks, and the rail road companies and other large industrial organizations are not seeking nor will they accept chiropractic manipulations or reasoning when it becomes a question of making health examinations or caring for their sick or injured employees and paying for the same. These organizations, carried on for profit, "are from Missouri, they have to be shown," and the chiropractic nonsense is too inconsistent and idiotic for them to consider.

MANY Indiana physicians may be interested in the meeting of the Tri-State Medical Association comprising the entire states of Iowa, Illinois, Wisconsin and Minnesota, which is to be held at Des Moines, Iowa, October 29, to November 1, inclusive. We do not remember to have seen on any medical program the names of so many very eminent men, and those who attend the session undoubtedly are in for a rare scientific treat.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

Don't forget that the Indiana State Medical Association holds this year's session at Terre Haute, on Wednesday, Thursday and Friday, September 26, 27 and 28.

THE Hotel Deming will be the headquarters for the State Association when it meets in Terre Haute in September. Those who desire to reserve accommodations should write at once.

THE Sheppard-Towner Maternity Act is now before the supreme court of the United States for the determination of its constitutionality. We hope that the act will be wiped off the statute books. It may be a sad blow to a lot of uplifters and grafters but it will be in the line of consistency.

If anyone thinks that the laboratories of our manufacturers of biological products are not busy let him read in this number of The Journal the long list of products used in diagnosing and treating protein sensitization. A very large list of protein extracts for diagnostic purposes comes from one manufacturer alone and probably many of the other well known manufacturers are equally active in the production of similar products.

At the San Francisco session of the American Medical Association a physician made the following remark: "In every malpractice suit you can put your finger on one or more doctors who have incited it." Isn't that a fine commentary upon our boasted medical ethics? He might have added that most of the disgruntled patients and the unfavorable criticism of medical men by lay persons is stimulated by members of the medical profession.

INDIANA is credited with 4,353 registered physicians. Out of this number a little over 2500 are members of the State Association, and half of that number are fellows of the American Medical Association. There should be a larger representation in the A. M. A. and in the State Association.

In fact, our percentage of representation as compared to the total number of physicians in the State is less than in most any other state in the Union. What's the reason? Let the officers of county medical societies answer.

THERE is a great need of divorcing municipal health administration from partisan politics, and until this is done we can not expect the best service. Fortunately some cities are recognizing this fact, as evidenced by the advertisement of the city of Savannah, Georgia, which appeared a few months ago, in which it is stated that the health commissioner for that city receives a salary of \$4,800 a year, an automobile is furnished for official business, and that "the city of Savannah guarantees the position of health commissioner free from political interference." This stand is a notable advance in the interests of public health and the example could be followed with profit by other cities.

ANY housewife, restaurant proprietor, or hotel keeper who will serve canned vegetables during the summer season when fresh green vegetables are so easily obtained, should be fined for failure to promote good health. This seems to be an age when every one tries to get something for nothing and to avoid everything that requires a little labor. No wonder we are a nation having such a large proportion of neurotics and disturbers. We boast of our progress, but we might profit by studying the experiences in the lives of some of our forefathers who knew the value of industry, thrift and right living from every angle.

IN revising the principles of medical ethics a committee of the American Medical Association has suggested several changes. One in particular is of interest and is as follows: "In embarrassing situations or wherever there may seem to be a possibility of misunderstanding with a colleague, the physician should always seek a personal interview with his fellow." Perhaps it would be well if we all would remember that embarrassing situations, misunderstandings, and even unfriendly attitudes usually may be avoided if medical men will meet each other more often to discuss differences of opinion or settle grievances.

A NUMBER of correspondents have offered criticism concerning the management of Robert W. Long Hospital in Indianapolis, and all say, "Do not publish my letter." One correspondent says, "I would like to offer some criticism but if I did I would be crucified the next time I went to the hospital, and I go there often." This is the wrong spirit to exhibit. Every one likes a man who plays square and does his fighting in the open. There is no reason for hiding behind bushes or standing in the rear and shoving others forward to do the

fault finding. Instructive criticism should be welcomed everywhere, and if the management of the Robert W. Long Hospital is deserving of censure, then let us have it openly and above board.

PRESIDENT HARDING is dead. Like everyone else he comes in for more praise and appreciation after he is dead than he ever received while he was living. His character and accomplishments indicate that he was a great man. It is unfortunate that he could not have lived to carry out some of the principles and policies he represented. His death reminds us that the "grim reaper" is no respecter of persons and has no regard for the lives or work of any individual. While we sometimes may delude ourselves with the idea that no one can take our place, yet in reality someone always does come up to take our place and the world goes merrily on. However, what Harding accomplished will stand as a monument for all time and its real value will be better understood in the years to come.

EVERY medical man who has used questionable methods of advertising himself and his work can find an excuse for his practice by pointing to similar methods and misdeeds on the part of conferees. It doesn't seem to occur to him that because one man does something wrong is no reason why others should follow suit. The Judicial Council of the American Medical Association has been investigating the subject of professional advertising and has considered the advertisements used by individual physicians, group clinics, pay clinics, and hospitals owned by individuals or groups, and reported that practically all the advertising thus considered has been found objectionable. In fact, the inference is made that state and county medical societies may well act in a censorial capacity in trying to eliminate objectionable advertising.

DIAGNOSTIC clinics now form a part of nearly every program of the sessions of the prominent medical societies. That these clinics are appreciated is evidenced by the very large attendance every where that they are scheduled. Often they are more instructive than the written papers and discussions, but the valuable feature in connection with them is that the actual patient is employed in bringing out the salient points in diagnosis and treatment. Why shouldn't our State Association arrange for diagnostic clinics in connection with every annual session? We offer the suggestion that a committee on clinics be appointed to co-operate with the regular scientific committee in arranging programs. If diagnostic clinics are to be a part of the program they should not interfere to the slightest extent with the regular scientific meetings at which papers are read and discussed.

THE American Medical Association Council on Health and Public Instruction has been authorized by the House of Delegates of the A. M. A. to prepare suitable forms for the examination of persons supposedly in health, and to recommend that county medical societies be encouraged to make the announcement that their members are prepared and ready to conduct such examinations, only the indigent to be examined free of charge, all others to pay for such examinations.

The old idea of telling patients not to report again until some symptoms or condition arises which makes the patient feel that he is not right, is entirely wrong. Every person, if he will prolong life, to say nothing of saving himself inconvenience and expense, will have a health examination periodically, and that recommendation should be given to every patient.

MUCH discussion has occurred among hospitals as to the admission of chiropractors or osteopaths, and it may be interesting to members of hospital staffs and others connected with the management of the hospitals to know that the board of control of any hospital not maintained by general taxation has the legal right, for reasons sufficient to the board, to refuse the privileges of the hospital at any time to any practitioner regardless of his so-called school of practice. The fact that the person applying for permission to bring to and treat in the hospital a particular patient is licensed by the state to practice does not alter the situation. The medical staff of a hospital likewise has the moral right to refuse to accept as an associate any person whom the staff may consider objectionable for reasons sufficient to the staff, and should insist on maintaining that right.

THAT the public needs education concerning the best means of caring for the health is evidenced by the questions that are propounded to the medical men who are conducting health columns in various daily papers. No doubt the work of Drs. Evans, Brady, Hurty and others who are editors of such departments as "How to Keep Well" are doing a great work but there is room for further activities along this line. Think, for instance, of the need of education among people who admit having no other treatment for syphilis than chiropractic massage, and who never have learned to suspect the dangers of typhoid infection in the old fashioned open well with its "old oaken bucket." Furthermore, it is time to come out emphatically concerning the criminal teachings of chiropractors that their manipulations will cure all of the diseases to which flesh is heir.

NEW YORK CITY is to have a three million dollar combination hospital and hotel for the sick who desire and can pay for every luxury, comfort and convenience obtainable for those ill. The

building will be located in a fashionable part of the city, overlooking the Hudson river, twenty-two stories in height, fireproof throughout, and it will be equipped with every thing that money can buy in order to make it the last word in luxurious appointments for the purpose for which the building is intended, and, as the promoters say, you can "make a holiday of your illness." You can have your operation and your treatment, and you can have your family and friends with you if you so like, for the accommodations and service will be anything that you care to pay for. Very naturally, the hotel-hospital will be patronized by the very wealthy only and as the percentage of people who can afford to pay for such a service is large the enterprise ought to be a profitable one.

SEVERAL state medical associations have been required to pay an income tax. The demand has been based on the hypothesis that because a medical association maintains a medical defense service for its members it loses the exemption to which it is entitled as a scientific body not organized for profit. The Nebraska State Medical Association made an appeal to the commissioner of internal revenue and obtained a decision to the effect that the association is not required to make the returns demanded.

It is possible that congress will revise the revenue act of 1921 and if so it is hoped that some different provision will be made for exemption in computing federal income tax upon physicians. For instance, the expense of attending meetings of medical associations should be a justifiable deduction. We hope the Bureau of Legal Medicine and Legislation of the A. M. A. will keep everlastingly at this matter until some semblance of justice is obtained.

It is interesting to note the experiences of various medical associations in furnishing medicolegal defense for its members. Twenty-one state associations furnish defense and indemnity in malpractice suits. The cost per member per year for this service varies from four cents to \$4.13. Most of the associations set aside a definite sum for medical defense. This varies from twenty-five cents to seven dollars per member. In one state the fund is made up of voluntary contributions of ten dollars each. In a few states the expense is paid as needed out of the general fund of the association. In another state indemnity is furnished for those who subscribe for it at ten dollars per annum. In Indiana, seventy-five cents out of every member's dues is set aside for medical defense, but two years ago the surplus had reached such proportions that a substantial amount from the medical defense fund was returned to the general treasury. There is no question but that medicolegal defense furnished by the state as-

sociation is a valuable feature and when managed properly can be furnished at a minimum cost. Indiana presents the example of satisfactory results at a minimum expense.

One of our members who was sued for malpractice and was successfully defended conjointly by the Association and a medical defense company, makes the very justifiable complaint that when he pays for medical defense in the Association he is entitled to defense by the Association, irrespective of any other defense that he may have obtained, and he also holds that the same is true of defense by any insurance company. His complaint is that instead of the Association joining with the insurance company and providing but one attorney for his defense, he had a right to expect that the insurance company would furnish one attorney and the Association would furnish another, thus strengthening his defense. His contention is entirely correct, and while he won his case yet we believe that any doctor who pays for defense is entitled to what he pays for, and the Association should furnish its own attorney who will act alone if it is the only defense provided for, but that the doctor should not be required to accept one attorney as acting for both the association and the insurance companies, providing he holds several policies or contracts guaranteeing him medicolegal defense in malpractice trials.

THE Veterans' Bureau has given its approval of chiropractic as a calling suitable for disabled veterans. This was done without the advice of the medical department of the army, the navy or the public health service, and, in fact, without any rational advice whatever. There is no evidence to show that there is any resemblance of adequate supervision and control over the courses of training for which the government is paying. The American Medical Association pointed out the absurdity of the situation to the Veterans' Bureau, and a protest was made against the continuing of chiropractic training at public expense, but without accomplishing anything. At present, as pointed out by the Bureau of Legal Medicine and Legislation of the A. M. A., "the Veterans' Bureau stands sponsor for the doctrine that head lice, syphilis, gonorrhea, tuberculosis and intestinal parasites can be cured by spinal adjustments." The Veterans' Bureau is at present under investigation (which no doubt it needs) by a select committee created by the United States senate, and it is hoped that the inconsistency and injustice of some of the things for which the Veterans' Bureau stands, such as chiropractic for instance, may be corrected.

AN attendant at the meeting of the American Osteopathic Association announces that enlarged

tonsils and adenoid tissue should not be removed from children as they are quite useful. He points out that God put them there for a purpose, but he neglected to say that God also probably is responsible for warts, harelip, cleft palate and a few other deformities which we are in the habit of correcting for the benefit of the patient. He also neglects to tell his hearers why many perfectly healthy children do not have enormous tonsils and a large bunch of adenoid tissue in the nasopharynx, and nature must have been unkind to those children if enlarged tonsils and adenoid tissue are a necessary thing in the scheme of growth. The unfortunate thing connected with the irrational and inconsistent teachings of some of the pseudo-medical cults is that the public press makes much of it, and it takes a long time to overcome such propaganda. Perhaps when the American Medical Association and all of its constituent societies get busy in furnishing trustworthy information to the public through Hygeia and other means that now are being considered, the harm done by the propaganda of the pseudo-medical cults will be less conspicuous.

THE American Medical Association boasts of a membership of practically ninety thousand, of which about fifty-four thousand are fellows. The essential difference between a fellow and a member is that a fellow, aside from being a member, pays dues to the American Medical Association. A member is merely a member of some affiliated organization, like a state association, and therefore eligible to become a fellow of the A. M. A. if he chooses to pay the A. M. A. dues. We never have quite understood the reason for this classification, and it is but natural that there should be a great deal of misunderstanding and confusion in respect to membership and fellowship. A man may be good enough to be eligible to membership in the Presbyterian church but he doesn't become a member of that church until he affiliates with it and fulfills the requirements of the church, so why made a doctor a member of the A. M. A. simply because he is eligible to membership? Furthermore, as members of the A. M. A. have no right to participate in the work of the scientific assembly, and have no vote, it seems ridiculous to even classify them as members. A member of the A. M. A. reminds us of the fellow caught by a falling window—he is neither in nor out.

OCCASIONALLY we hear some doctor say that some one is impersonating him in the practice of medicine, and generally the information comes about through complaint from a lay person who has been imposed upon and swindled in the treatment of some real or imaginary disease. Probably such instances are commoner than we think they are, for at the present time we seem to be developing some evidences which show that we have

doctors who for one cause or another are unable to obtain licenses to practice medicine but who are doing a thriving business by going from one locality to another and discreetly impersonating some well established physician of the locality in which they ply their trade. As soon as suspicion is aroused the swindler moves to another locality and practices the same tactics again. Up to the present time it has been difficult to apprehend and prosecute the offenders, but we believe that when any reputable doctor is impersonated by another, every effort should be put forth to secure evidence that will result in punishment of the offender. The State Board of Medical Registration and Examination will aid in the work, and the United States post office department will take a hand in the investigation when the mails have been used by any impostors.

ADAMS County has erected a hospital costing approximately one hundred thirty-five thousand dollars and dedicated it to the memory of the Adams county people who participated in the World War. The principal dedicatory address was delivered by Dr. C. H. Good, president of the Indiana State Medical Association. The address was a splendid effort and gave the very large lay audience present some instructive information concerning what preventive and curative medicine has done for the people in prolonging life, as it also commended to the people the value of well equipped and intelligently run hospitals and trained nursing. He made an excellent point when he emphasized the importance of giving the conduct of the hospital to those who are educated in the management of hospitals, and that the hospital best serves the people when it is divorced from politics, incompetency, and medical quackery. He made one point that should be everlastingly drilled into the public and that is that "The man or woman who treats so precious a thing as human life must study a certain number of years and then serve as a hospital intern before going out to practice. All that the regular profession asks is that a man who holds himself out to treat diseases should be qualified in the medical science, competent to make a diagnosis, and to use the remedy that in his best judgment will cure or relieve the disease."

PROHIBITION officers in Indiana are getting very active and very officious. Apparently they are working in squads, visiting various sections of the state where they bring terror to innocent and inoffensive citizens whose houses are ransacked, oftentimes in the middle of the night, without the slightest cause and in such a manner as to bring severe condemnation from all respectable and law abiding citizens to say nothing of creating disrespect for all law when the federal government permits or sanctions such imposition.

We have no fault to find when the officers under due process of law and in a fair way, search any premises the owner of which there is reasonable ground for suspecting, but when it comes to forcing entrance, oftentimes in the middle of the night, into the private homes of highly respected citizens upon whom not the slightest suspicion of wrongdoing exists, merely because some busybody has reported that such citizen has in his possession even a small quantity of alcoholic liquor, is carrying things altogether too far. This country is not yet ready to adopt soviet measures, and the surest way to breed contempt for all law is to make it oppressive. We have been told that a lot of prohibition fanatics are responsible for some of the raids upon the homes of respectable citizens, and that the federal officers have been encouraged to adopt spectacular and underhanded means employed to gain entrance and search the premises. Certainly nothing is gained by such tactics. For there are a lot of people in this country who normally would support prohibition enforcement, when rationally conducted, who will turn against it when oppressive measures such as mentioned are introduced.

It is all right to quote the familiar stanza beginning "Lives of great men all remind us," etc., but the fact remains that there are mighty few of us who ever leave any "imprint on the sands of time" unless we do something that is very unusual. Really, the world cares very little for any of us unless we give much, and that is soon forgotten. In fact, altogether too often the world praises as well as condemns unjustly and without sufficient cause, and forgetting is the one best thing that the American people do. We are reminded of this by an incident that came to our notice quite recently. An old doctor, unusually skillful as well as successful, but unmindful of the need of acquiring a competence for advancing age, was finally incapacitated and forced to accept the charity of a few friends during his declining years. He finally died, and his passing created not the slightest ripple in the current of events in the community where he lived. All of the good work he had accomplished for the community for which he never had been paid adequately and more often not at all, was entirely forgotten, and he went to his grave practically a pauper, even the expense of his final care having been borne by those who had least cause to give him consideration. Some may say that the man's life was rich in the fulfillment of good deeds and in the service to humanity, but who will not say that his last days, which should have been full of comfort and content, were marked by regret that his life's work had been so little appreciated, and that he had given so little attention to self. There is an old saying that, "The Lord helps those who help themselves" and we

might add that if you neglect to provide for your care during old age it is seldom that you can find any one who will do it for you, for this world, while it is a very good one to live in while the sun is shining and everything is lovely, yet it is a selfish world and is very largely one where every man has to look out for himself.

ADVICE on the hygiene of swimming and matters of saving life are apropos, and the New York State Department of Health is to be commended for the information that is being given publicity along this line. A general circular which has been issued contains the statement that any adult not knowing how to perform artificial respiration must be considered ignorant of some of the common rules of life. Briefly described, and the information should be printed in every town paper in the land, it is as follows:

The unconscious person is placed face downward on the ground, arms extended above the head, face a little to one side to allow free passage of the air. The tongue will drop forward of its own weight and require no holding. Fluids in the air passages will run or be forced out.

Without stopping to remove wet clothing of the unconscious person, as every instant of delay is dangerous, the operator should kneel astride or one side of the patient's body facing the head. Placing your hands flat in the small of his back, with the thumbs nearly touching and the fingers spread out on each side of the body over the lowest ribs, lean forward, and steadily allow the weight of your body to fall over upon them, and so produce a firm downward pressure, which must not be violent. By this means the air (and water, if there be any), is driven out of the patient's lungs. Immediately thereafter swing backward, rapidly releasing the pressure, but without lifting the hands from the patient's body. Repeat this forward and backward movement every four or five seconds. Keep this up until natural respirations are resumed. If they again fail, the process must be repeated.

While the operator is carrying out artificial respiration, others may apply hot flannels to the limbs and body, and hot bottles to the feet, or by rubbing upward promote warmth by friction; but no attempts should be made to give any restoratives by the mouth until natural breathing has recommenced. When natural respiration is once established, cease to imitate the movement of breathing.

IF Hygeia is read by the laity, and we hope that such readers will continue to increase in number, an immense amount of good will be accomplished. The August number calls attention to some of the fallacies concerning health and its management and it also calls attention to some of the frauds that are perpetrated upon the public

by quack doctors and medicine manufacturers. In one article it is pointed out that with proper treatment given before hay fever starts, one-fourth of the patients are entirely freed from hay fever symptoms, almost one-fifth are practically free, almost one-half have only about twenty-five per cent as much as usual and another one-fourth have only fifty per cent as much trouble as usual. Ragweed is given as the most common cause of the trouble. However, effects similar to hay fever are produced by the inhalation of vegetable dust in factories and this may occur at any time of the year. This type is known as "mill fever," and occasionally it is accompanied by asthma.

A valuable suggestion is offered to vacationists concerning the treatment of poisoning by ivy, sumac, oak and other poisonous plants. Those who are susceptible should carry a strongly alkaline soap or a bottle of gasoline with which to remove the resinous substance which causes the irritation of the skin. The areas touched by the poison should be washed thoroughly with soap and water.

The aspirin habit is condemned and people advised to get rid of the cause rather than the symptoms by taking aspirin, which is not entirely harmless. Furthermore, the assumption that no aspirin is "genuine" without the Aspirin-Bayer label is exploded. Acetylsalicylic acid made by any of the reputable manufacturers is just as genuine as the so-called original aspirin, and costs one-fifth as much at wholesale.

The advertising physician with his specious announcement that examinations are free is condemned and it is pointed out that most of these men are dishonest and some times enormous fees are charged for treating a fictitious disease.

All in all, Hygeia presents a large amount of trustworthy information for the laity and it is hoped that the popularity of the magazine will increase constantly. If the public will digest the information furnished by Hygeia there will be much less deception and fraud in connection with the practice of medicine and there will be a much better understanding of all of the problems pertaining to health. Every doctor should make a special effort to promote the reading of Hygeia by the public. Hygeia may be obtained by subscription or at all leading news stands.

An editor encounters many things that have a tendency to make him petulant and discouraged, not the least of which is recognition of the fact that those who should give him encouragement and assistance often fail signally in their duty. For instance, the members of our Association expect that *THE JOURNAL* will publish the proceedings of medical societies, especially the State Medical Association, and make all announcements

and give all the required information concerning meetings and the important events in which medical men, individually and collectively, are interested. The officers of the county and district medical societies are expected to furnish for publication in *THE JOURNAL* the reports of the meetings of their respective societies, and they also are expected to furnish a notice of deaths in their respective communities and such news items concerning members of the profession as they think will be interesting to the profession throughout the State. Very few of these officials ever furnish a single line of copy, and yet they sometimes glibly, though falsely, say to the members of their societies that they furnish reports and the reports are not used. In preparing the announcements for the annual session of the State Association it becomes necessary to secure reports from officers and committees in order that *THE JOURNAL* may advertise the annual session in a proper manner and encourage attendance. However, every year, despite numerous letters and telegrams, it is a struggle to get some of the officers and committees to furnish reports or other data necessary in order to carry comprehensive announcements concerning the coming session of the Association. This year is no exception. The preliminary program for the Terre Haute session is supposed to be in not later than the first of August so that it can be published in the current number of *THE JOURNAL*, but less than one-third of the copy was in the editor's hands on the first of the month. The completed program and all announcements of the annual session are supposed to be printed in the September number of *THE JOURNAL*, and yet every year brings about the same struggle to secure the requisite copy from those and those only who are capable of furnishing it, namely the officers and members of committees. Entreaty by letter and telegraph oftentimes is wasted effort, and we often wonder how men can be so oblivious to duty and responsibility. Just why the practice of medicine should make any one careless and indifferent to obligations is hard to understand, and yet it seems to be a recognized fact and taken by common consent that doctors are an untrustworthy lot, except when actually practicing medicine, and even then they are not always to be trusted. It is not our intention to be too severe in criticism, nor to unjustly parade the faults of members of the medical profession, but the editor of *THE JOURNAL* has an obligation to fulfill in caring for the best interests of the Association and it is absolutely impossible for him to fulfill those obligations unless he secures the required co-operation and support of those who should give something of their time and thought to Association affairs, and give the editor of *THE JOURNAL* the benefit in order that the Association activities may be aided as much as possible through the work of *THE JOURNAL*.

DEATHS

JOHN W. CARNEY, M. D., of Edinburg, died July 1 at the age of seventy-one years.

JOHN C. ADKINS, M. D., of Marion, died July 15. Dr. Adkins was eighty years of age.

DANIEL P. DEAVIS, M. D., of Francisco, died July 16, at the age of seventy-eight years.

OLIVER GARD, M. D., of Frankfort, died July 18 at the age of eighty-one years. Dr. Gard was a graduate of the Rush Medical College, Chicago, in 1869.

R. H. CALVERT, M. D., of South Bend, died July 17 at the age of seventy-one years. Dr. Calvert graduated from the Medical College of Ohio, Cincinnati, in 1869.

JOSEPH D. McCANN, M. D., died at his home in Monticello, July 8, aged sixty-five years. Dr. McCann graduated from the Eclectic Medical College, Cincinnati, in 1888.

HENRY C. DAVISSON, M. D., of Hartford City, died July 6 at the age of eighty-seven years. Dr. Davisson was a graduate of the Indiana Medical College, Indianapolis, in 1871.

SAMUEL D. SLEDD, M. D., of Fort Wayne, died July 27 at the age sixty-eight years. Dr. Sledd graduated from the Medical College of Fort Wayne in 1878. He was a member of the Indiana State Medical Association and the American Medical Association.

IRIS J. VAUGHAN, M. D., of Topeka, died June 26 at the age of sixty-one years. Dr. Vaughan graduated from the University of Michigan Medical School at Ann Arbor in 1884. He was a member of the Lagrange County Medical Society, the Indiana State Medical Association and was a fellow of the American Medical Association.

JOHN FERGUSON THOMSON, M. D., of Garrett, died July 25. Dr. Thompson was seventy-three years of age. He served as president of the Association of Baltimore and Ohio Physicians and Surgeons for many years. Dr. Thomson graduated from the University of Michigan Medical School at Ann Arbor in 1875. He was a member of the DeKalb County Medical Society.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE Ripley County Medical Society held a meeting at Osgood, June 29.

DR. JOHN A. FLORA, of Flora, Indiana, and Miss Beth Morris were married June 29, at Flora.

DR. JOHN H. GREEN, of North Vernon, has been appointed a member of the state board of health.

DR. HERMAN M. BIGGS, New York State Commissioner of Health, died June 28 as the result of broncho-pneumonia.

THE Jay County Medical Society held a meeting July 12 at Portland. Dr. Hiatt presented a paper on "The Technique of Normal Obstetrics."

THE newspapers report that the Canadian government has conferred an annuity of \$7,500 a year on Dr. F. C. Banting, the discoverer of insulin.

DR. C. H. GOOD, of Huntington, and Dr. Harry G. Hill, of Indianapolis, were speakers at the dedication of the Adams county memorial hospital July 29.

DR. THOMAS A. GROOVER, of Washington, D. C., has lost half his left forearm and two fingers from his right hand through his researches in roentgenology.

THE Northeastern Indiana Academy of Medicine held a meeting July 12 at Butler. Dr. Charles G. Beall, of Fort Wayne, presented a paper on "Hypothyroidism."

THE Rush Medical College Alumni will have a noon luncheon on September 27th. All Rush men who will be present kindly notify Dr. E. L. Mattox, Tribune Building, Terre Haute, Indiana.

MR. JAMES E. BARTLETT has acquired a controlling interest in the Pitman-Moore company, of Indianapolis, and will assume immediate executive management as president and general manager.

DR. C. J. ADAMS, of Kokomo, is taking special work at the Royal London Ophthalmic Hospital. Dr. Adams intends going to Vienna, Budapest and Berlin for special work before returning home.

THE Grant County Medical Society held a meeting at Upland, June 26. Dr. Charles P. Emerson, of Indianapolis, presented a paper, his subject being "Diabetes and Its Treatment with the New Drug Insulin."

THE Tri-State District Medical Association of Iowa, Illinois, Wisconsin and Minnesota and districts of surrounding states, will hold a meeting

at Des Moines, Iowa, on October 29th, 30th, 31st and November 1st, 1923.

THE sixth triennial congress of the International Surgical Society was opened July 17 by the Prince of Wales at the Royal Society of Medicine, London, with 748 surgeons representing twenty-eight nations in attendance.

THE Kosciusko County Medical and the Wabash County Medical Societies held a meeting at North Manchester July 17. Papers were presented by Dr. A. C. McDonald, of Warsaw, and Dr. R. V. Huffman, of South Bend.

SIXTEEN nurses of the first district held a meeting July 14 at the new Blackford County hospital at Hartford City. Dr. W. A. Hollis presented a paper on "Hygiene and Prophylaxis in Eye Diseases and Eye Injuries," and Dr. C. A. Sellers presented a paper on "Insulin and Treatment of Diabetes."

THE Tri-County Medical Society, consisting of Jackson, Jennings and Bartholomew counties held a picnic July 11 at Indiana Mound Park on the banks of the White river, near Seymour. The physicians engaged in an informal discussion of therapeutics while the wives and families of the physicians enjoyed boat rides on the river. It was decided at this meeting to hold an annual picnic.

THE Indianapolis Association for the Prevention and Relief of Heart Disease has established headquarters at 135 East Market Street. The new officers are: Dr. C. J. McIntyre, president; William R. Stuart, vice president; Henrietta E. Ellingwood, secretary, and Martha Allerdice, treasurer. The directors include Drs. J. R. Eastman, C. H. McCaskey, John W. Carmack, W. A. Ocker, F. A. Henshaw, W. E. Pennington, Edward F. Kiser, James A. Wynn, Robert M. Moore, George Bond, I. W. Riggins and James C. Carter.

THE ninth annual meeting of the Medical Women's National Association was held in San Francisco, June 25 and 26, in conjunction with the American Medical Association meetings. Dr. Kate Campbell Mead, of Middletown, Connecticut, was installed as president; Dr. Katherine C. Manion, of Port Huron, Michigan, was chosen president-elect; Dr. Martha Welpton, of San Diego, first vice-president; Dr. Jessie W. Fisher, Middletown, Connecticut, secretary, and Dr. L. Rosa H. Gantt, Spartanburg, S. C., treasurer. The 1924 annual meeting of the Medical Women's National Association will be held in Chicago, Ill.

THE annual golf game held at the time of the meeting of the State Medical Association will be

on Wednesday, September 26th, 1923, on one of the Terre Haute courses to be designated later. Dr. F. G. McCarthy heads the local committee on arrangements and assures us that there will be games for both the doctors and their wives. It has been the custom in the past to play eighteen holes medal handicap either in the forenoon or afternoon. Each year has seen an increase in the number of entrants and with the popularity which the game has gained, we expect a record-breaking crowd this year. At the last meeting Dr. W. S. Tomlin was elected president of the club and Dr. Carl Habich was elected secretary.

THE following Indiana doctors were registered at the San Francisco session of the American Medical Association: Ames, George F., Eaton; Beeler, Raymond C., Indianapolis; Bosenbury, Charles S., South Bend; Boyd-Snee, H., South Bend; Boyers, James S., Decatur; Braginton, Fred, Indianapolis; Bulson, Albert E., Jr., Fort Wayne; Carmack, John W., Indianapolis; Chappell, Ralph S., Indianapolis; Charles, Etta, Anderson; Cowing, Hugh A., Muncie; Cregor, Frank W., Indianapolis; Dixon, Frank H., Franklin; Eberwein, J. H., Indianapolis; Elliott, Harry, Brazil; Engle, Walter, Indianapolis; Gillespie, J. F., Greencastle; Greene, Geo. S., Gary; Griffith, B. B., Vincennes; Hamer, H. G., Indianapolis; Henry, Alfred, Indianapolis; Homman, Grace Line, La Porte; Johnson, Paul S., Richmond; Kearby, D. O., Indianapolis; Keiper, George F., La Fayette; Kemfer, G. W., Muncie; King, James E., Richmond; Kuhn, B. F., Elkhart; Layman, Daniel W., Indianapolis; Martin, F. V., Michigan City; Miller, S. T., Elkhart; Mazingo, Arvine E., Indianapolis; Parker, H. C., Gary; Ragan, Charles E., Clinton; Slocum, Stewart, Fortsville; Spink, Urban, Indianapolis; Stauffer, W. A., Elkhart; Sterne, Albert E., Indianapolis; Sutherland, P. N., Angola; Terry, Oliver P., Lafayette; Tomlin, Wm. B., Indianapolis; Vanderburg, J. M., Albany; Van Sweringen, Budd, Fort Wayne; Walters, Arthur L., Indianapolis; Ward, John Paxton, Vevay; Warne, George H., Tipton; Whitledge, C. A., Anderson; Woolery, Perry, Heltonville.

THE Tri-State District Medical Association, comprising the entire states of Iowa, Illinois, Wisconsin and Minnesota and districts of surrounding states, will hold its annual session at Des Moines, Iowa, October 29th, 30th, 31st and November 1st. The entire time of the assembly will be taken up with scientific addresses, essays, symposiums and diagnostic clinics. Indiana physicians are invited to attend and participate in the program.

Among the eminent members of the profession who will take part in the program are the following:

Sir Robert A. Falcon, President of University of Toronto, Toronto, Canada.

Dr. Fred H. Albee, Prof. of Orthopedic Surgery, New York Post-Graduate Medical School, New York, N. Y.

Dr. Edward William Archibald, Associate Prof. of Clinical Surgery, University of McGill, Montreal, Canada.

Dr. William S. Baer, Associate Prof. of Orthopedic Surgery, Johns Hopkins University, Medical School, Baltimore, Md.

Dr. Willard Bartlett, St. Louis, Missouri.

Dr. Frederic Atwood Besley, Prof. of Surgery, Northwestern University, Medical School, Chicago, Illinois.

Dr. Francis G. Blake, Prof. of Medicine, Yale University, School of Medicine, New Haven, Conn.

Dr. Hugh Cabot, Dean and Prof. of Surgery, University of Michigan, Medical School, Ann Arbor, Michigan.

Dr. Richard Cabot, Prof. of Medicine, Harvard University, School of Medicine, Boston, Mass.

Dr. Frederic J. Cotton, Associate in Surgery, Harvard University, School of Medicine, Boston, Mass.

Dr. George W. Crile, Prof. of Surgery, Western Reserve University, School of Medicine, Cleveland, Ohio.

Dr. Byron B. Davis, Prof. of Clinical Surgery, University of Nebraska, School of Medicine, Omaha, Nebr.

Dr. John B. Deaver, Prof. of Surgery, University of Pennsylvania, School of Medicine, Philadelphia, Pa.

Dr. Charles P. Emerson, Dean & Prof. of Medicine, Indiana University, School of Medicine, Indianapolis, Ind.

Dr. John F. Erdmann, Prof. of Surgery, New York Post-Graduate School of Medicine, New York, N. Y.

Dr. Charles H. Frazier, Prof. of Neurosurgery, University of Pennsylvania, School of Medicine, Philadelphia, Pa.

Dr. Leonard Freeman, Prof. of Surgery, University of Colorado, School of Medicine, Denver, Colorado.

Dr. Willis D. Gatch, Prof. of Surgery, Indiana University, School of Medicine, Indianapolis, Ind.

Dr. William A. Jenkins, Prof. of Medicine and Clinical Medicine, University of Louisville, School of Medicine, Louisville, Ky.

Dr. Elliott P. Joslin, Prof. of Clinical Medicine, Harvard Medical School, Boston, Mass.

Dr. Frank C. Knowles, Prof. of Dermatology, Jefferson Medical College, Philadelphia, Pa.

Dr. Dean Lewis, Prof. of Surgery, Rush Medical College, Chicago, Ill.

Dr. Charles F. Martin, Prof. of Medicine, McGill University, Faculty of Medicine, Montreal, Canada.

Dr. Charles H. Mayo, Mayo Clinic, Rochester, Minn.

Dr. William J. Mayo, Mayo Clinic, Rochester, Minn.

Dr. Charles N. Meader, Dean & Prof. of Medicine, University of Colorado, School of Medicine, Denver, Colorado.

Dr. Oliver H. Pepper, Assistant Prof. of Medicine, University of Pennsylvania, School of Medicine, Philadelphia, Pa.

Dr. Canby G. Robinson, Dean and Prof. of Medicine, Vanderbilt University, School of Medicine, Nashville, Tenn.

Dr. Ernest Sachs, Prof. of Clinical Neurosurgery, Washington University, Medical School, St. Louis, Mo.

Dr. Clarence L. Starr, Prof. of Surgery, University of Toronto, Faculty of Medicine, Toronto, Canada.

Dr. William S. Thayer, Emeritus Prof. of Medicine, Johns Hopkins University, School of Medicine, Baltimore, Md.

Dr. Allen Whipple, Prof. of Surgery, Columbia University, College of Physicians and Surgeons, New York, N. Y.

Dr. Hugh H. Young, Clinical Prof. of Urology, Johns Hopkins University, Baltimore, Maryland.

MEDICAL RESEARCH AND ADVANCEMENT SYMPOSIUMS

Presented by the teaching staffs of the following universities:

University of Iowa.

University of Wisconsin.

University of Illinois.

University of Chicago.

Northwestern University.

Western Reserve University (Crile Clinic)
Cleveland.

University of Minnesota Graduate School of
Medicine (Mayo Clinic).

University of Indiana.

University of Michigan.

PROGRAM COMMITTEE.

Dr. Dean Lewis, Chicago, Illinois.

Dr. E. Starr Judd, Rochester, Minnesota.

Dr. Walter L. Bierring, Des Moines, Iowa.

Dr. John L. Yates, Milwaukee, Wisconsin.

OFFICERS OF THE ASSOCIATION

President of Clinics, Dr. William J. Mayo, Rochester, Minn.

Honorary President, Dr. James R. Guthrie, Dubuque, Iowa.

President, Dr. Horace M. Brown, Milwaukee, Wisconsin.

President-Elect, Dr. Clifford U. Collins, Peoria, Illinois.

Vice-President, Wisconsin, Dr. Joseph S. Evans, Madison, Wis.

Vice-President, Illinois, Dr. Edwin P. Sloan, Bloomington, Ill.

Vice-President, Iowa, Dr. Frank M. Fuller, Keokuk, Iowa.

Managing-Director, Dr. William B. Peck, Freeport, Illinois.

Associate Managing-Director, Dr. J. Sheldon Clark, Freeport, Ill.

Secretary, Dr. Edwin Henes, Jr., Milwaukee, Wisconsin.

Treasurer, Dr. Henry G. Langworthy, Dubuque, Iowa.

Note:—Requirement for admittance, membership in some State Medical Society.

SOCIETY PROCEEDINGS

"LET'S GO—3000 MEMBERS FOR 1923"

To realize this, our President's slogan for this year, it will be necessary for every county society to increase its membership over that of 1922.

The following list comprises the counties who have already done this, and it is hoped that in the succeeding numbers of THE JOURNAL, this list will grow until it includes every county society. If the secretary of any of the smaller county societies will demonstrate to Dr. Combs that his county society cannot show further accessions because of the fact that every eligible doctor is already a member, the name of this secretary will be placed at the head of the list.

County	Secretary
1. Adams	B. F. Beavers
2. Dubois	W. D. Bretz
3. Elkhart	S. T. Miller
4. Knox	C. E. Stone
5. Noble	S. E. Munk
6. Whitley	F. G. Grisier
7. Allen	D. D. Johnston
8. Boone	W. H. Spieth
9. Daviess-Martin	H. C. Wadsworth
10. Gibson	A. H. Rhodes
11. Rush	J. M. Lee
12. Shelby	F. E. Bass
13. Warrick	W. P. Ford
14. Floyd	P. H. Schoen
15. Fulton	A. E. Stinson
16. Huntington	M. G. Erecht
17. Monroe	F. H. Austin
18. Porter	C. H. Dewitt
19. Clinton	L. L. Harding
20. Howard	Florence Olmsted
21. Kosciusko	O. H. Richer
22. Lake	E. E. Evans
23. Marion	Wm. A. Doeppers
24. Posey	John Ranes
25. St. Joseph	R. B. Dugdale
26. Wayne	R. L. Hiatt

INDIANA STATE MEDICAL ASSOCIATION

The Program Committee has announced the following list of papers for the annual session of the Indiana State Medical Association to be held at Terre Haute, September 26, 27, 28, 1923:

President's Address.

Guest's Address—The Function of the Thyroid Gland and the Mortality Following Its Surgical Treatment—Charles Mayo, Rochester, Minnesota.

MEDICAL SECTION

Diphtheria Control—L. P. Harshman, Fort Wayne.

Epidemic Encephalitis—After Effects—W. A. Fankboner, Marion.

Insulin in Diabetes—J. A. MacDonald, Indianapolis.

General Clinical Management of Diabetes—B. M. Edlavitch, Fort Wayne.

Tuberculosis of the Bronchial Lymph Glands—T. J. Beasley, Indianapolis.

Arthritis of the Spine—Grace L. Homman, Laporte.

The Frequency of Thymic Hyperplasia in Toxic and Non-Toxic Goiters—A. S. Giordano, South Bend.

Physio Therapy—W. W. Carey, Fort Wayne.

Subject to be announced—John Lovett Morse, Boston, Mass.

Syphilis of the Lung—F. E. Sayers, Terre Haute.

Secondary Anemia—C. L. Cummer, Cleveland, Ohio.
Use of X-ray and Radium in the Treatment of Superficial Malignancy—A. M. Cole, Indianapolis.

SURGICAL SECTION

The Treatment of Neoplastic Diseases by Combined Methods, with Lantern Illustrations—W. L. Clark, Philadelphia, Pennsylvania.

Osteomyelitis—W. H. Stemm, North Vernon.

Experimental Studies of Kidney Regeneration—Ernest Rupel, Indianapolis.

Gonorrheal Infection in the Female—D. R. Ulmer, Terre Haute.

Various Kinds of Face Deformities helped by Operation—Lantern Illustrations—V. P. Blair, St. Louis, Missouri.

Some Problems of Blood Transfusion—W. D. Little, Indianapolis.

A Preliminary Report of the Use of Quinine and Urea Hydrochloride in the Treatment of Fissure Ani—A. B. Graham, Indianapolis.

Anesthesia from a Review of 2500 Cases—Floyd Romberger, West Lafayette.

Major Surgical Obstetrics—G. B. Jackson, Indianapolis.

Use of Parham-Martin Bands in Fractures of Long Bones—Lantern Illustrations—E. B. Mumford, Indianapolis.

EYE, EAR, NOSE AND THROAT SECTION

Chairman's Address—C. J. Adams, Kokomo.

Dacryo-Cysto-Rhinostomy—J. R. Gillum, Terre Haute.

Diagnosis of Foreign Bodies in the Air Passages—Eugene L. Bulson, Fort Wayne.

Retinitis Proliferans—B. J. Larkin, Indianapolis.

Retinitis Proliferans, Case Report—E. J. Lent, South Bend.

The Association of Para-Nasal Sinus Infection with Broncho-Pulmonary Disease—R. E. Repass, Indianapolis.

Conservative Ethmoid Surgery—E. McGinness, Chicago, Illinois.

Subject to be announced—M. Ravdin, Evansville.

The names of the discussants will appear in the September issue of THE JOURNAL, along with the completed program.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

SOFOS.—A mixture of sodium dihydrogen phosphate and sodium hydrogen carbonate (sodium bicarbonate), rendered stable by coating the particles of one of the constituents with disodium hydrogen phosphate. One part of sofos has the same phosphate value as 1.75 parts of sodium phosphate U. S. P. When sofos is treated with water, sodium phosphate (Na_2HPO_4) is formed and carbon dioxide is set free. Sofos has the physiologic action of sodium phosphate. It differs from the effervescent sodium phosphate preparations in that it is free from citrate or tartrate. General Chemical Co., New York.

POLLEN EXTRACTS—P. D. & Co.—Liquids obtained by extracting the proteins from the dried pollen of various species of plants. The products are standardized in "units," a unit being the extractive obtained from 0.002 Mg. of pollen. For a discussion of the actions and uses of pollen preparations, see Pollen and Epidermal Extract Preparations and Biologically Reactive Food Proteins, New and Nonofficial Remedies, 1923, p. 234. These preparations are marketed in packages for diagnostic use and in packages intended both for diagnostic use and for treatment. The following preparations are marketed: Pollen Extract Ragweed—P. D. & Co., and Pollen Extract Timothy—P. D. & Co., Parke, Davis & Co., Detroit. (*Jour. A. M. A.*, July 7, 1923, p. 27.)

SULPHARSPHENAMINE-BILLON.—A brand of sulpharsphenamine-N. N. R. (see *Jour. A. M. A.*, March 31, 1923, p. 919). It is marketed in ampules containing, respectively, 0.1 Gm., 0.2 Gm., 0.3 Gm., 0.4 Gm., 0.5 Gm. and 0.6 Gm. Powers-Weightman-Rosengarten Co., Philadelphia.

RADIUM EMANATION (Radium Emanation Corporation).—The emanation, mechanically removed from a solution of a radium salt, in admixture with inert gases. It is supplied in sealed glass capillary tubes; each tube accompanied by a statement of the amount of radium emanation in terms of millicurie contained in it at the time of sale. The radiation from radium emanation as a therapeutic agent is analogous in all respects to that from radium and its salts, except that the activity decreases rapidly (see Radium and Radium Salts, New and Nonofficial Remedies, 1923, 255). The intensity of radium emanation decreases rapidly through decay (at the rate of about three-fourths per cent. per hour). Radium Emanation Corporation, New York. (*Jour. A. M. A.*, July 21, 1923, p. 213).

POLLEN PROTEIN ALLERGENS—Squibb.—In addition to the products described in New and Nonofficial Remedies, 1923, p. 241, the following have been accepted: Ash Pollen Allergen-Squibb; Hickory Pollen Allergen-Squibb; Honeysuckle Pollen Allergen-Squibb; Maple Pollen Allergen-Squibb; Oak Pollen Allergen-Squibb; Pine Pollen Allergen-Squibb; Poplar Pollen Allergen-Squibb. E. R. Squibb & Sons, New York.

ANIMAL EPIDERMAL EXTRACTS ALLERGENS—Squibb.—In addition to the products described in New and Nonofficial Remedies, 1923, p. 241, the following have been accepted: Beaver Fur Allergen-Squibb; Chamois Skin Allergen-Squibb; Civet Cat Fur Allergen-Squibb; Fox Fur Allergen-Squibb; Kolinsky Fur Allergen-Squibb; Leonard Fur Allergen-Squibb; Mink Fur Allergen-Squibb; Muskrat Fur Allergen-Squibb; Mole Fur Allergen-Squibb; Opossum Fur Allergen-Squibb; Persian Cat (Angora) Fur Allergen-Squibb; Pony Fur Allergen-Squibb; Raccoon Fur Allergen-Squibb; Seal (Alaskan) Fur Allergen-Squibb; Seal (Hudson) Fur Allergen-Squibb; Sheep's Wool Allergen-Squibb; Skunk Fur Allergen-Squibb; Squirrel Fur Allergen-Squibb.

FOOD ALLERGENS—Squibb.—In addition to the products described in New and Nonofficial Remedies, 1923, p. 242, the following have been accepted: Apricot Allergen-Squibb; Butterfish Allergen-Squibb; Cocoa Allergen-Squibb; Coconut Allergen-Squibb; Cottonseed Allergen-Squibb; Duck Allergen-Squibb; Fig Allergen-Squibb; Flaxseed Allergen-Squibb; Ginger Allergen-Squibb; Goat Allergen-Squibb; Guinea-Hen Allergen-Squibb; Hay (Alfalfa) Allergen-Squibb; Huckleberry Allergen-Squibb; Lemon Allergen-Squibb; Olive (ripe) Allergen-Squibb; Paprika Allergen-Squibb; Pineapple Allergen-Squibb; Pheasant Allergen-Squibb; Pumpkin Allergen-Squibb; Rabbit Allergen-Squibb; Scallop Allergen-Squibb; Sea-bass Allergen-Squibb; Smelt Allergen-Squibb; Sole Allergen-Squibb; Tea Allergen-Squibb; Tobacco Allergen-Squibb; Vanilla Allergen-Squibb; Whiting Allergen-Squibb; Yeast Allergen-Squibb.

POLLEN EXTRACTS—Arlco.—In addition to the products described in New and Nonofficial Remedies, 1923, p. 237, the following have been accepted: Arizona Ash Pollen Extract-Arlco; Arizona Cottonwood Pollen Extract-Arlco; Arizona Walnut Pollen Extract-Arlco; Bermuda Grass Pollen Extract-Arlco; Burr Ragweed Pollen Extract-Arlco; Burroweed Pollen Extract-Arlco; California Mugwort Pollen Extract-Arlco; Carelessweed Pollen Extract-Arlco; Carpet Sage Pollen Extract-Arlco; Greasewood Pollen Extract-Arlco; Hill Sage Pollen Extract-Arlco; Johnson Grass Pollen Extract-Arlco; Mexican Tea Pollen Extract-Arlco; Mountain Cedar Pollen Extract-Arlco; Orach Pollen Extract-Arlco; Pigweed Pollen Extract-Arlco; Prairie Ragweed Pollen Extract-Arlco; Russian Thistle Pollen Extract-Arlco; Sage Brush Pollen Extract-Arlco; Sea Blite Pol-

len Extract-Arlco; Shad Scale Pollen Extract-Arlco; Western Ragweed Pollen Extract-Arlco; Wild Sunflower Pollen Extract-Arlco.

Pollen Extracts-Arlco are marketed in sets of five vials representing graduated concentrations; also in concentrated solution in capillary tubes for diagnostic test. Arlington Chemical Co., New York. (*Jour. A. M. A.*, July 28, 1923, p. 299.)

In addition to the articles already enumerated, the following articles have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Arlington Chemical Co.

Pollen Extracts—Arlco:

Arizona Ash Pollen Extract-Arlco; Arizona Cottonwood Pollen Extract-Arlco; Arizona Walnut Pollen Extract-Arlco; Bermuda Grass Pollen Extract-Arlco; Burr Ragweed Pollen Extract-Arlco; Burroweed Pollen Extract-Arlco; California Mugwort Pollen Extract-Arlco; Carelessweed Pollen Extract-Arlco; Carpet Sage Pollen Extract-Arlco; Greasewood Pollen Extract-Arlco; Hill Sage Pollen Extract-Arlco; Johnson Grass Pollen Extract-Arlco; Mexican Tea Pollen Extract-Arlco; Mountain Cedar Pollen Extract-Arlco; Orach Pollen Extract-Arlco; Pigweed Pollen Extract-Arlco; Prairie Ragweed Pollen Extract-Arlco; Russian Thistle Pollen Extract-Arlco; Sage Brush Pollen Extract-Arlco; Sea Blite Pollen Extract-Arlco; Shad Scale Pollen Extract-Arlco; Western Ragweed Pollen Extract-Arlco; Wild Sunflower Pollen Extract-Arlco.

Lederle Antitoxia Laboratories.

Pollen Antigens-Lederle:

Annual Salt Bush Pollen Antigen-Lederle; Bermuda Grass Pollen Antigen-Lederle; Cocklebur Pollen Antigen-Lederle; Johnson Grass Pollen Antigen-Lederle; Mountain Cedar Pollen Antigen-Lederle; Mugwort Pollen Antigen-Lederle; Oak Pollen Antigen-Lederle; Orchard Grass Pollen Antigen-Lederle; Perennial Rye Grass Pollen Antigen-Lederle; Rabbit Bush Pollen Antigen-Lederle; Redroot Pigweed Pollen Antigen-Lederle; Russian Thistle Pollen Antigen-Lederle; Spiny Amaranth Pollen Antigen-Lederle; Yellow Dock Pollen Antigen-Lederle.

National Aniline Chemical Co.

Scarlet Red Medicinal—"National."

Parke, Davis & Co.

Protein Extracts Diagnostic—P. D. & Co.:

Almond Protein Extract Diagnostic-P. D. & Co.; Apple Protein Extract Diagnostic-P. D. & Co.; Asparagus Protein Extract Diagnostic-P. D. & Co.; Banana Protein Extract Diagnostic-P. D. & Co.; Barley Protein Extract Diagnostic-P. D. & Co.; Bean (Lima) Protein Extract Diagnostic-P. D. & Co.; Bean (Navy) Protein Extract Diagnostic-P. D. & Co.; Bean (String) Protein Extract Diagnostic-P. D. & Co.; Beef Protein Extract Diagnostic-P. D. & Co.; Beef Serum Protein Extract Diagnostic-P. D. & Co.; Blackberry Protein Extract Diagnostic-P. D. & Co.; Black Pepper Protein Extract Diagnostic-P. D. & Co.; Black Walnut Protein Extract Diagnostic-P. D. & Co.; Bluefish Protein Extract Diagnostic-P. D. & Co.; Brazil Nut Protein Extract Diagnostic-P. D. & Co.; Buckwheat Protein Extract Diagnostic-P. D. & Co.; Butternut Protein Extract Diagnostic-P. D. & Co.; Cabbage Protein Extract Diagnostic-P. D. & Co.; Cantaloupe Protein Extract Diagnostic-P. D. & Co.; Carrot Protein Extract Diagnostic-P. D. & Co.; Cat Hair Protein Extract Diagnostic-P. D. & Co.; Cattle Hair Protein Extract Diagnostic-P. D. & Co.; Celery Protein Extract Diagnostic-P. D. &

Co.; Cheese Protein Extract Diagnostic-P. D. & Co.; Cherry Protein Extract Diagnostic-P. D. & Co.; Chestnut Protein Extract Diagnostic-P. D. & Co.; Chicken Protein Extract Diagnostic-P. D. & Co.; Clam Protein Extract Diagnostic-P. D. & Co.; Cocoa Protein Extract Diagnostic-P. D. & Co.; Codfish Protein Extract Diagnostic-P. D. & Co.; Coffee Protein Extract Diagnostic-P. D. & Co.; Corn Protein Extract Diagnostic-P. D. & Co.; Crab Protein Extract Diagnostic-P. D. & Co.; Cucumber Protein Extract Diagnostic-P. D. & Co.; Dog Hair Protein Extract Diagnostic-P. D. & Co.; Duck Protein Extract Diagnostic-P. D. & Co.; Duck Feathers Protein Extract Diagnostic-P. D. & Co.; Egg (all proteins) Protein Extract Diagnostic-P. D. & Co.; Egg White Protein Extract Diagnostic-P. D. & Co.; Egg Yolk Protein Extract Diagnostic-P. D. & Co.; Eggplant Protein Extract Diagnostic-P. D. & Co.; English Walnut Protein Extract Diagnostic-P. D. & Co.; Fig Protein Extract Diagnostic-P. D. & Co.; Garlic Protein Extract Diagnostic-P. D. & Co.; Ginger Protein Extract Diagnostic-P. D. & Co.; Goose Protein Extract Diagnostic-P. D. & Co.; Goose Feathers Protein Extract Diagnostic-P. D. & Co.; Grapefruit Protein Extract Diagnostic-P. D. & Co.; Guinea-hen Protein Extract Diagnostic-P. D. & Co.; Guinea Pig Hair Protein Extract Diagnostic-P. D. & Co.; Haddock Protein Extract Diagnostic-P. D. & Co.; Halibut Protein Extract Diagnostic-P. D. & Co.; Herring Protein Extract Diagnostic-P. D. & Co.; Hickory Nut Protein Extract Diagnostic-P. D. & Co.; Horse Hair Protein Extract Diagnostic-P. D. & Co.; Horse Serum Protein Extract Diagnostic-P. D. & Co.; Juniper Pollen Protein Extract Diagnostic-P. D. & Co.; Lamb Protein Extract Diagnostic-P. D. & Co.; Lemon Protein Extract Diagnostic-P. D. & Co.; Lettuce Protein Extract Diagnostic-P. D. & Co.; Lobster Protein Extract Diagnostic-P. D. & Co.; Mackerel Protein Extract Diagnostic-P. D. & Co.; Milk (Cow's) (all proteins) Protein Extract Diagnostic-P. D. & Co.; Milk (Human) Protein Extract Diagnostic-P. D. & Co.; Mugwort (wormwood) Pollen Protein Extract Diagnostic-P. D. & Co.; Mustard Protein Extract Diagnostic-P. D. & Co.; Mutton Protein Extract Diagnostic-P. D. & Co.; Oat Pollen Protein Extract Diagnostic-P. D. & Co.; Orris Root Protein Extract Diagnostic-P. D. & Co.; Oatmeal Protein Extract Diagnostic-P. D. & Co.; Onion Protein Extract Diagnostic-P. D. & Co.; Chicken Feathers Protein Extract Diagnostic-P. D. & Co.; Orange Protein Extract Diagnostic-P. D. & Co.; Oyster Protein Extract Diagnostic-P. D. & Co.; Parsnip Protein Extract Diagnostic-P. D. & Co.; Pea Protein Extract Diagnostic-P. D. & Co.; Peach Protein Extract Diagnostic-P. D. & Co.; Peanut Protein Extract Diagnostic-P. D. & Co.; Pear Protein Extract Diagnostic-P. D. & Co.; Pecan Protein Extract Diagnostic-P. D. & Co.; Pepper (Sweet) Protein Extract Diagnostic-P. D. & Co.; Perch Protein Extract Diagnostic-P. D. & Co.; Pike Protein Extract Diagnostic-P. D. & Co.; Pineapple Protein Extract Diagnostic-P. D. & Co.; Paprika Protein Extract Diagnostic-P. D. & Co.; Plum Protein Extract Diagnostic-P. D. & Co.; Pork Protein Extract Diagnostic-P. D. & Co.; Prune Protein Extract Diagnostic-P. D. & Co.; Potato (Sweet) Protein Extract Diagnostic-P. D. & Co.; Potato (White) Protein Extract Diagnostic-P. D. & Co.; Pumpkin Protein Extract Diagnostic-P. D. & Co.; Rabbit Hair Protein Extract Diagnostic-P. D. & Co.; Radish Protein Extract Diagnostic-P. D. & Co.; Ragweed Pollen Protein Extract Diagnostic-P. D. & Co.; Raspberry Protein Extract Diagnostic-P. D. & Co.; Red Papper Protein Extract Diagnostic-P. D. & Co.; Redtop Pollen Protein Extract Diagnostic-P. D. & Co.; Rhubarb Protein Extract Diagnostic-P. D. & Co.; Rice Protein

Extract Diagnostic-P. D. & Co.; Russian Thistle Pollen Protein Extract Diagnostic-P. D. & Co.; Rye Protein Extract Diagnostic-P. D. & Co.; Rye Pollen Protein Extract Diagnostic-P. D. & Co.; Sage Protein Extract Diagnostic-P. D. & Co.; Salmon Protein Extract Diagnostic-P. D. & Co.; Scallop Protein Extract Diagnostic-P. D. & Co.; Shad Protein Extract Diagnostic-P. D. & Co.; Sheep Wool Protein Extract Diagnostic-P. D. & Co.; Shrimp Protein Extract Diagnostic-P. D. & Co.; Smelt Protein Extract Diagnostic-P. D. & Co.; Sole Protein Extract Diagnostic-P. D. & Co.; Spinach Protein Extract Diagnostic-P. D. & Co.; Squab Protein Extract Diagnostic-P. D. & Co.; Squash Protein Extract Diagnostic-P. D. & Co.; Strawberry Protein Extract Diagnostic-P. D. & Co.; Tea Protein Extract Diagnostic-P. D. & Co.; Timothy Pollen Protein Extract Diagnostic-P. D. & Co.; Tomato Protein Extract Diagnostic-P. D. & Co.; Turkey Protein Extract Diagnostic-P. D. & Co.; Turnip Protein Extract Diagnostic-P. D. & Co.; Veal Protein Extract Diagnostic-P. D. & Co.; Watermelon Protein Extract Diagnostic-P. D. & Co.; Wheat Protein Extract Diagnostic-P. D. & Co.

Radium Emanation Corporation.

Radium Emanation (Radium Emanation Corporation).

E. R. Squibb & Sons.

Pollen Protein Allergens-Squibb:

Ash Pollen Allergen-Squibb; Hickory Pollen Allergen-Squibb; Honeysuckle Pollen Allergen-Squibb; Maple Pollen Allergen-Squibb; Oak Pollen Allergen-Squibb; Pine Pollen Allergen-Squibb; Poplar Pollen Allergen-Squibb.

Animal Epidermal Extract Allergens-Squibb:

Beaver Fur Allergen-Squibb; Chamois Skin Allergen-Squibb; Civet Cat Fur Allergen-Squibb; Fox Fur Allergen-Squibb; Kolinsky Fur Allergen-Squibb; Leopard Fur Allergen-Squibb; Mink Fur Allergen-Squibb; Muskrat Fur Allergen-Squibb; Mole Fur Allergen-Squibb; Opossum Fur Allergen-Squibb; Persian Cat (Angora) Fur Allergen-Squibb; Pony Fur Allergen-Squibb; Raccoon Fur Allergen-Squibb; Seal (Alaskan) Fur Allergen-Squibb; Seal (Hudson) Fur Allergen-Squibb; Sheep's Wool Allergen-Squibb; Skunk Fur Allergen-Squibb; Squirrel Fur Allergen-Squibb.

Food Allergens-Squibb:

Apricot Allergen-Squibb; Butterfish Allergen-Squibb; Cocoa Allergen-Squibb; Coconut Allergen-Squibb; Cottonseed Allergen-Squibb; Duck Allergen-Squibb; Fig Allergen-Squibb; Flaxseed Allergen-Squibb; Ginger Allergen-Squibb; Goat Allergen-Squibb; Guinea-Hen Allergen-Squibb; Hay (Alfalfa) Allergen-Squibb; Huckleberry Allergen-Squibb; Lemon Allergen-Squibb; Olive (ripe) Allergen-Squibb; Paprika Allergen-Squibb; Pineapple Allergen-Squibb; Pheasant Allergen-Squibb; Pumpkin Allergen-Squibb; Rabbit Allergen-Squibb; Scallop Allergen-Squibb; Sea-bass Allergen-Squibb; Smelt Allergen-Squibb; Sole Allergen-Squibb; Tea Allergen-Squibb; Tobacco Allergen-Squibb; Vanilla Allergen-Squibb; Whiting Allergen-Squibb; Yeast Allergen-Squibb.

Winthrop Chemical Co.

Elixir of Luminal.

PROPAGANDA FOR REFORM

TOXICITY OF CARBON TETRACHLORID.—Experiments on dogs demonstrated that large doses of carbon tetrachlorid produced degenerative changes in the liver and kidneys of these animals. In view of these findings and the experience of Lambert, it would appear advisable that the dose of carbon tetrachlorid be reduced in routine treatments. (*Jour. A. M. A.*, July 7, 1923., p. 47.)

THE DREYER TUBERCULOSIS VACCINE.—Newspapers have carried extended notices of the Dreyer so-called "defatted" tuberculosis vaccine. The experiments of Professor Dreyer of the Department of Pathology of Oxford University depend on the production of an antigen preparation from tubercle bacilli which are previously deprived of their waxy envelop by treatment with a formaldehyd solution. Animal experiments and some clinical trials have been reported which give ground for the hope that the new antigen may prove of value. Professor Dreyer's work does not offer sufficient evidence to warrant the conclusion as yet that any marked improvement has been made in the treatment of tuberculosis. (*Jour. A. M. A.*, July 14, 1923, p. 138.)

ANOTHER ELECTRONIC DIAGNOSIS AND TREATMENT.—A report on the case of Mr. D., who was treated for carcinoma by C. E. Phelps, M. D., an Abrams disciple of Hartley, Iowa, is of interest because it represents, undoubtedly, what is duplicated in hundreds, if not thousands, of cases, in various parts of the country. The clinical report is by Dr. E. E. Munger of Spencer, Iowa, and the pathological report was made by Dr. E. R. LeCount of Chicago. Briefly, it is the story of a man in his seventies suffering from inoperable carcinoma of the stomach with implanted metastasis on various other abdominal organs. Dr. Munger diagnosed the condition when the patient first came to him. The diagnosis was verified at the Mayo Clinic. Then the man began taking the "Abrams Treatment." He was led to believe that he was being rapidly cured and was finally told that "everything had cleared up except a trace of colicsep-sis." A month later he died. (*Jour. A. M. A.*, July 28, 1923, p. 317.)

ETHYL CHLORID AS A GENERAL ANESTHETIC.—The published mortality rate from ethyl chlorid anesthesia varies from 1 in 15,000, which is also the mortality rate of ether anesthesia, to about 1 in 6,000. From these statistics, therefore, one might judge that ethyl chlorid stands between ether and chloroform; but it is probably closer to the latter, which gives a mortality of about 1 in 3,500. Ethyl chlorid, however, is used for minor anesthesia, and it is unfair to compare it with the major anesthetics for prolonged operations. The fair comparison for ethyl chlorid is with nitrous oxid, the accepted mortality rate from which is about 1 death in 1,000,000 anesthetics. Hence, whether for induction of anesthesia or for minor anesthesia, ethyl chlorid is somewhere between 200 and 66 times more dangerous than nitrous oxid. It is, on the other hand, somewhat safer than chloroform. The essential danger from ethyl chlorid lies in the suddenness of the death which may occur within half a minute from the beginning of the inhalation. The danger signs are such as may be overlooked by any but the most experienced anesthetist. (*Jour. A. M. A.*, July 28, 1923, p. 320.)

BOOK REVIEWS

THE HEART IN MODERN PRACTICE, DIAGNOSIS AND TREATMENT. By W. D. Reid, A. B., M. D., Chief of Heart Clinic at Boston Dispensary. 352 pages with 32 illustrations. J. B. Lippencott Co. Price \$8.50.

A brief outline of the recent advances in cardiology, intended for the student and practicing physician. The subject is divided into three sections: etiological, functional and structural. The subject matter is presented in conversational style.

THE COMPOSITION OF CERTAIN PATENT AND PROPRIETARY MEDICINE. By John Phillips Street, Chemist in charge of Analytical Laboratory, Connecticut Agricultural Experiment Station. 274 pages, more than 2500 remedies: over 3100 analyses. American Medical Association, 535 North Dearborn St., Chicago. \$1.25.

During the past few years hundreds of "patent" and

proprietary medicines have been analyzed with the object of giving the public information that would be of vital interest to it. This work has been done by federal and state officials and especially by the chemists of the American Medical Association. The information unfortunately has been scattered through many publications, and for this reason has not been easily accessible either to the public or to officials. The purpose of Mr. Street's compilation is to remedy this difficulty, in a measure, by bringing together in one work an accurate record of published analyses. The book contains analyses (one or more) of over 2500 proprietary medicines, including the most widely used and extensively advertised products offered to the American public. The analyses are published without comment and without prejudice and the compact form in which they are presented should prove a great usefulness to the physician, the pharmacist, the inspection official and the intelligent layman.

PRACTICE OF PREVENTIVE MEDICINE. By J. G. Fitzgerald, M. D., F. R. S. C., Prof. of Hygiene and Preventive Medicine. University of Toronto, 826 pages. C. V. Mosby & Co. Price \$7.50.

Intended to instruct the physician to become the supervisor of public health not only of his community but of the individual family. The subjects are well presented and each disease given full consideration. Laboratory methods of examination and hygienic methods of disease control are well presented. This book is to be recommended.

THE RIDDLE OF THE RHINE. Chemical Strategy in Peace and Wars, by Victor Lefebure, Fellow of the Chemical Society, Chevalier de la Legion d' Honneur, with a preface by Marshall Foch and introduction by Field Marshall Willson. Published by E. P. Dutton & Co., New York.

One of the developments of the recent world war was chemical warfare. It appears that the next war will be fought in the air and through the chemical laboratory with much more appalling and formidable results over more extended areas than could possibly be conceived by mere common and man-power. This book gives a complete description in narrative style of the use of poison gas, etc., in the late war. This book is the last word on chemical warfare and the scientific and economic conditions that underly it. We recommend this book to all those interested in world affairs.

THE CLIQUE

What is the Clique? 'Tis those who attend
All of the meetings, on whom we depend.
They never are absent unless they are sick—
These are the ones the grouch calls "The Clique."

These are the ones who are never behind with their dues
Who come to the meetings and have their own views.
They'll serve on committees and never say die;
"The Clique" are the ones that always "get by."

We all should be proud of members like these—
You can call them "The Clique" or whatever you please.
They never attempt any duties to shirk—
These are "The Clique," that do most of the work.

But there are some people who always find fault,
And most of this kind are not worth their salt.
They like to start trouble, they seldom will stick;
They like to put all the work on "The Clique."

Harkavy, in the *Journal of the American Medical Association*, December 9, 1922, reports nine cases of bronchial asthma in which the asthmatic attacks were dated from an antecedent pneumonia.

Doctor, When You Want a Reliable Aid to Digestion

Specify Elixir of Enzymes, a palatable combination of ferments that act in acid medium.

Also one of the best vehicles for iodides, bromides, salicylates and other disturbers.

Elixir of Enzymes is dependable in stomachic and intestinal disorders easily controlled if taken in time, but serious when neglected.

Pituitary Liquid

is the premier preparation of the Posterior Pituitary.

Standardized
1 c. c. ampoules Surgical
1/2 c. c. ampoules Obstetrical



Booklet on
Endocrines
for
Physicians

ARMOUR AND COMPANY
CHICAGO

WALLACE-SOMERVILLE SANITARIUM

Succeeding the Pettey & Wallace Sanitarium

MEMPHIS, TENN.

WALTER R. WALLACE, M.D.
WILLIAM G. SOMERVILLE, M.D.

FOR THE TREATMENT OF

**DRUG ADDICTIONS, ALCOHOLISM
MENTAL AND NERVOUS DISEASES**



Located in the Eastern suburbs of the city.
Sixteen acres of beautiful grounds.
All equipment for care of patients admitted.

Louisville Neuropathic Sanatorium

INCORPORATED

1412 South Sixth Street, Louisville, Kentucky

and Nervous Diseases. Situated in residence portion of the city, yet quiet and retired. Rates furnished upon request.

W. E. GARDNER, A.B., M.D.

Medical Director

W. E. RENDER, M.D.

Resident Physician



NITROGEN RETENTION IN CHRONIC INTERSTITIAL NEPHRITIS AND ITS SIGNIFICANCE

The conception that increase in the nonprotein nitrogen content of blood or plasma in chronic interstitial nephritis is due to a direct mechanical retention by an impaired kidney, in the original sense of Strass, Hilding Berglund, Boston (*Journal A. M. A.*, Oct. 21, 1922), asserts is, as a whole, the correct one. There is, however, at least the possibility, argued especially by German authors, that an elevated nonprotein nitrogen in certain cases represents only a higher level at which a complete nitrogen equilibrium is maintained; and in chronic cases, with moderately elevated nonprotein nitrogen persisting for months at the same level, another interpretation seems hardly possible. This type of case deserves a special interest from the dietetic standpoint; if there is no response of the nonprotein nitrogen on a decreased protein intake, the value of a very restricted diet seems questionable. Contrary to a fairly common statement of the influence of the diet on the level of the nonprotein nitrogen in normal persons, Berglund believes that it is important to point out that a high protein intake—a common finding in wealthy patients—in a person who, clinically, may be considered normal may give a nonprotein nitrogen content as high as from 40 to 45 mg. in the whole blood and from about 30 to 35 mg. in the plasma; that is, about 75 per cent. higher than the figures from the same person after a few days of a low protein diet. The point of practical importance to be emphasized is that the change from a high to a low level does not immediately follow the change in the diet. If the lowest possible nonprotein nitrogen figure is wanted in a person on the boundary of the abnormal, it is, therefore, not sufficient merely to have him drop in any morning before breakfast to have his blood tested. In general, it has not proved at all possible as yet to apply the physiologic or pharmacologic theories as to kidney function on the functional disturbances of the different anatomic types of kidney lesion. Further, the considerable interest given to a physiologic differentiation between glomerular and tubular activity cannot be further cultivated in the clinic, since a disturbance of the glomerular function, due to anatomic lesions, is necessarily followed by a functional disturbance of the tubular activity, as a consequence of the anatomic unity of the blood supply. Furthermore, there is reason enough to doubt whether a functional disturbance is always accompanied by any appreciable lesion at all. Certainly, the waste product retention can-

not be satisfactorily interpreted in any other way than as a result of a deficient kidney activity. The validity of this interpretation is, therefore, independent not only of the simultaneous occurrence of anatomic lesions, but even of the occurrence of other clinical signs of kidney disease.

PROTEIN SENSITIZATION

A diagnostic and prophylactic study was made by A. G. Gould, Ithaca, N. Y. (*Journal A. M. A.*, Feb. 10, 1923), of the majority of male students with histories of hay-fever, asthma, eczema or recurring urticaria, at Cornell University. An attempt was made to diagnose these cases by means of allergic reactions to pollen, epidermal, food or bacterial proteins, and to desensitize the students by subcutaneous injections of the offending protein or by having them avoid the offending protein or proteins. In the hay-fever cases, hypodermic injections were made at five-day intervals with the specific pollen protein extracts, in dilutions of 1: 10,000, 1: 5,000, 1: 1,000, 1: 500, and 1: 100. The injections were begun approximately seventy-five days before the expected onset of the hay-fever season. The amounts injected were: 1: 10,000: 0.1, 0.2, 0.3 c.c.; 1: 5,000: 0.2, 0.3, 0.4 c.c.; 1: 1,000, 0.2, 0.3, 0.4 c.c.; 1: 500: 0.2, 0.3, 0.4 c.c.; 1: 100: 1 minim, increased by 1 minim every five days until 5 minims have been given at one time. Of the patients, 12.5 per cent. received 100 per cent. relief; 38 per cent., between 75 and 95 per cent. relief; 31 per cent., between 50 and 74 per cent.; 12.5 per cent., between 20 and 49 per cent., and 6 per cent., little or no relief. Of the seven asthma patients, 55 per cent. received entire relief from the asthma by prophylaxis and improved personal hygiene. Fifteen cases of eczema and recurring urticaria were studied through the reactions to food protein extracts. A new cutaneous reaction to food protein extracts seen in eczema cases occurs at the site of the cutaneous test and shows itself usually within one-half hour. The appearance is as if the upper layer of epidermis has been removed, leaving a reddish abraded surface, which exudes minute droplets of serum. In some ways, it looks like a minute area of weeping eczema. The lesion does not heal for several days and then becomes covered with the characteristic scab of all abraded surfaces. Gould has not seen mention of this type in the literature of protein desensitization. Those patients reacting to foods that were very easily abstained from quickly responded and were soon relieved of the eczema. Those who reacted to foods, such as wheat, milk and egg, would improve for a short time and then relapse, probably because of some dietary indiscretion.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XVI

SEPTEMBER 15, 1923

NUMBER 9

ORIGINAL ARTICLES

INFECTIONS OF THE NASAL ACCESSORY SINUSES*

SAMUEL M. BAXTER, M. D.
NEW ALBANY, INDIANA

Anatomy: The nasal accessory sinuses are a number of cavities, hollowed out within the bones surrounding the nose. They are filled with air and are lined with mucous membrane directly continuous with that of the meatuses of the nose. These sinuses are grouped in pairs and are named according to the bones within which they are formed,—i.e., the frontal, maxillary or antrum of Highmore, sphenoidal, and anterior and posterior ethmoidal sinuses.

For practical purposes the nasal accessory sinuses are divided into two groups,—the anterior and posterior groups. This division is made because of the points in the nose into which the sinuses drain.

In the anterior group are the frontal, maxillary, and anterior ethmoidal sinuses. The ostia of these drain in the middle meatus of the nose,—in the infundibulum under the middle turbinate bone. The frontal sinus drains under the forward end of the middle turbinate bone above the hiatus semilunaris. The ostia of the anterior ethmoidal cells are variously situated between the bullae ethmoidalis and the attachment of the middle turbinate bone. The maxillary sinus or antrum of Highmore drains under the posterior end of the middle turbinate bone in a deep furrow.

The posterior group of sinuses consist of the posterior ethmoidal and the sphenoidal sinuses. These cells drain in the superior meatus of the nose above the middle turbinate bone.

The points of drainage of these sinuses are of very great practical importance in the diagnosis and treatment of all sinus conditions. The mucous membrane lining the sinuses is composed of ciliated epithelium. The cilia wave toward the opening of the sinuses and assist in this way in draining them. The openings of the sinuses are situated in such a way that in every position of the body one of the sinuses will drain. This accounts for some of the peculiar symptoms of sinus

infection that help us in our differential diagnosis. For instance, the ostium of the frontal sinus is at the lowest point of the sinus and will drain when the patient is erect. This accounts for the pain in frontal sinusitis being relieved in an hour or so after the patient is on his feet. The ostium of the maxillary sinus is situated high in the sinus and drains when the patient is lying down.

The anatomy of the nasal accessory sinuses is complex and variable especially as regards the size, shape, and exact position of the sinuses. I have tried to touch only a few of the points that are of special importance in the diagnosis and treatment of the diseases of these cavities.

Etiology: The etiology of the inflammation of the accessory sinuses depends to a great extent upon conditions that interfere with drainage and ventilation of these cavities. Through continued colds or inflammation, the mucosa of the nose in the neighborhood of the sinus ostia becomes edematous and hyperplastic and interferes with normal drainage and ventilation. Suppurative disease of the sinuses is a direct result of bacterial invasion, but it is the opinion of most authors that the devitalization of the mucosa of the sinus is the first step toward infection.

The infective organisms gain entrance into the sinuses in the following manner: (1) through direct invasion, (2) through extension of inflammation from the neighboring parts, (3) through blood and lymph channels, (4) through traumatization, i.e., exposure to cold, sea bathing, automobile riding, etc., (5) through foreign bodies, (6) through contamination of pus from the overlying sinuses.

The most common organisms are the staphylococcus pyogenes aureus, staphylococcus pyogenes albus, streptococcus pyogenes, influenza bacillus, diplococcus pneumoniae, and pseudo diphtheria bacillus. Pure cultures of these organisms rarely are found in chronic cases. In some chronic cases there may be from three to five distinctive organisms isolated, and it is impossible to say which is the primary cause of the infection.

Chronicity of sinus infections is brought about by the following: (1) interference with the normal drainage. This interference may be congenital due to variations in the size and shape of the openings of the sinuses, to deviations of the nasal

*Read before the Third District Medical Society, at Bedford, Indiana, Wednesday, August 22, 1923.

septum, to too close approximation of the middle turbinate bone to the nasal septum; or the condition may be acquired due to hyperemia, nasal polyps, or hypertrophies. (2) Chronicity may be brought about by the virulence of the infecting organism, (3) by inflammatory changes in the mucous membrane of the sinuses, (4) by the recurrence of the attacks, and (5) by the consistency of the secretion.

Symptomatology: (1) Localized headache—is a very important part of the symptom complex. The causes of this headache are as follows: (a) swelling of the mucosa with pressure and irritation of the nerves, (b) direct contact of the swollen mucosa, (c) negative pressure in the sinus, (d) stasis of secretion following lack of drainage, (e) reabsorption of the toxins from within the sinus, (f) disturbance of the lymph and blood circulation at the base of the skull.

The character of the headache varies from a sharp twinging pain of neuralgia in acute cases to a heavy full benumbing sensation in chronic cases. Early morning headaches are especially characteristic. In some cases the headache returns at the same time every day and lasts for a definite period of from two to four hours. There may be periods of complete relief of the headache for days. The headache is markedly intensified by stooping or straining, or a sudden jarring of the body. Localization of the headache is not always definite. In acute maxillary sinusitis it is commonly over the sinus and along the supraorbital nerve branches; in acute frontal sinusitis it is over the sinus, but in chronic frontal sinusitis the headache may be over the whole forehead, in ethmoidal disease it is between the eyes and there is a feeling of fullness and a sense of weight in the vertex of the skull, and in sphenoidal sinusitis the headache is in the temples and in the mastoid region.

(2) The second characteristic symptom of sinus disease is tenderness over the sinus. This is a very valuable diagnostic symptom of disease of the frontal sinus and sometimes of the maxillary sinus. The point of tenderness in the frontal sinus is confined to a small area in the floor of the sinus directly over the inner canthus of the eye. Tenderness at this point is pathognomonic of frontal sinus disease when compared with the opposite side. The maxillary point of tenderness is in the canine fossa of the maxillary bone.

(3) Purulent secretion in the nose. The classical symptom of sinus empyema is the presence and continued reappearance of pus in a particular locality of the nose; such as beneath the anterior one-third of the middle turbinate bone in frontal, maxillary, and anterior ethmoidal disease, and in the olfactory fissure above and posterior to the middle turbinate in sphenoidal and posterior ethmoidal disease. This symptom is not always present at the morning examination. The maxillary and sphenoidal sinuses empty themselves periodically, especially during the sleeping hours. This

is due to the location of their ostia which favor drainage in the recumbent position. The frontal sinus drains after the patient has been in the upright position for one or two hours. One symptom that is directly caused by the secretion is the presence of an offensive odor in the nose. This is almost pathognomonic of sinus disease. It is noticed especially after blowing the nose or after sudden sniffing.

(4) General Symptoms: Fever is always present in the acute inflammation and in the acute exacerbations of the chronic affections. Rheumatic pains—aching in the muscles and joints—are often present in the subacute and chronic cases. Circulatory disturbances—flushing of the face, occlusion of the nares, and a feeling of fullness in the head are usually present.

Diagnosis: (1) Continued reappearance of pus in the nasal cavity. When a patient presents himself and sinus disease is suspected, our first thought is to examine the nasal passages for free pus. When pus is found in the middle passage of the nose it is important to find out if it is coming from a circumscribed inflammation of the nasal mucosa or from a reservoir of pus as in a sinus. The pus is wiped away with a small cotton mop. If it reappears in a few minutes we suspect sinus disease, as it is impossible for the nasal mucosa to secrete it so swiftly. If the pus is found under the middle turbinate bone we suspect disease of the anterior group of sinuses; namely the frontal, maxillary, and anterior ethmoidal cells. Of these the maxillary is the most commonly affected. Infection of this sinus can be definitely determined by a needle puncture into the sinus beneath the inferior turbinate bone and withdrawal of pus. Frontal sinus infection is definitely determined by the passage of a catheter into the sinus and thoroughly washing it. If pus is present in an appreciable quantity we know that the frontal sinus is diseased. However, if pus is found in the olfactory fissure or in the choana above the posterior end of the middle turbinate, disease of the posterior group—the sphenoidal and posterior ethmoidal cells is suspected. It is then necessary to follow the secretion to its source to make the correct diagnosis.

(2) Transillumination: By this method we mean the placing of a small electric light in such a position that the rays of light will penetrate the sinus and permit us to obtain an idea of its condition. This must be done in an absolutely dark room, or if this is impossible, a dark cloth covering the head of the patient and the physician may be used. The technique for the maxillary sinus is to place a small electric light in the patient's mouth, with the patient's lips closed around the edges of the handle. The current is increased until the face is luminous. If one side remains decidedly dark and the other light, we assume that there is some affection of the dark side. In addition to the direct illumination we look at the crescent of

light in the infraorbital space, for the red reflex in the pupil of the eye, and ask the patient for the subjective sense of light in the closed eye. For examination of the frontal sinus, a metal cover should be placed over the light so that the rays escape only at the tip. A double lamp is preferable so that comparison can be made with the opposite side. The lamps are placed against the floor of the sinus at the inner angle of the eye. Transillumination is only of benefit on the frontal and maxillary sinuses.

(3) Roentgen Ray—X-ray has been of great value not only in determining the size and contour in the sinuses, but their pathological condition as well. The best results are obtained in the superficial sinuses—the frontal, maxillary, and anterior ethmoidal cells. Unilateral disease is easiest to diagnose because of the possibility of comparison of the opposite side. A swollen or extremely thickened sinus mucosa will cause a shadow that makes x-ray diagnosis difficult. Differential diagnosis between the sphenoidal and posterior ethmoidal cells is extremely difficult.

Treatment: Acute Sinusitis: The patient presents himself with the nasal mucous membrane hyperemic and engorged. Inspection of the parts is useless because of the engorgement, and even though pus is present in large quantities it is impossible to say which sinus is draining. In this acute condition the two main objects of our treatment is to make the patient as comfortable as possible and to allay the inflammation. The relief of the patient's acute pain depends to a great extent upon keeping the drainage passages as clear as possible. The nose should be douched with a hot normal saline solution as hot as the patient can stand. Following this a pledget of cotton moistened with a 4% solution of cocaine hydrochloride to which have been added a few drops of a 1-1000 adrenaline chloride solution should be gently introduced under the middle turbinate. The pledget of cotton should be just moist with the solution, any excess of solution being squeezed out of it before introduction. This pledget of cotton should remain in the nose for ten minutes. When the cotton is withdrawn the nose should again be douched with the hot normal saline solution. This washes away the secretion along with any of the solution that may have remained and assists in depleting the mucous membrane. This treatment may be applied twice daily. Between treatments inhalations of menthol every two hours will help to relieve the congestion. Inhalation may be from a nebular solution but preferably from the following solution: menthol 1 dram, compound tincture of benzoin 4 ounces. This solution can be vapor-

ized in a croup kettle or by pouring two tablespoonfuls into a half pint of boiling water and allowing the patient to inhale the vapor. As the drainage passages are gradually opened the sinus mucosa becomes medicated with this vapor and the pressure symptoms are greatly relieved. Application of heat to the affected parts affords great relief. This may be applied by means of hot moist towels, or a hot water bottle, but the patient usually objects to anything that produces the least pressure. The electric head bath is useful in some cases. This may consist of one or several incandescent electric lights made to shine directly on the head of the patient, whose eyes are covered to protect them from the light. The severe headache should be controlled with sodium salicylate, aspirin, or any of the coal tar derivatives, or with opiates when necessary. The general treatment consists of rest in bed with freedom from chilling or exposure of the body. A calomel purge followed by saline should be administered. A capsule containing 2 gr. of sodium salicylate, 2 gr. of quinine bisulphate, and 1 gr. of Dover's powder every two hours is very useful.

Chronic Sinusitis: Treatment of chronic sinusitis in the absence of complications or urgent symptoms depends to a great extent on the individual. In individuals to whom it is a disadvantage to continue local treatment, radical measures are necessary. The indications in treatment are to facilitate drainage and to restore the mucous membrane to the normal state. Establishment of drainage may necessitate the removal of hypertrophies of the turbinate bones, removal of nasal polyps, or the straightening of a deviated nasal septum. With proper drainage and ventilation of the sinus cavity established, the purulent process will gradually disappear. Catheterization of the ostia and thorough lavage of the sinus will in some cases effect a permanent cure. Suction of the secretion from the sinus has been advocated by some authors. When the nasal mucosa has been shrunk and the sinus ostia opened as far as possible, negative pressure is applied to the nares and the patient asked to pronounce the letter K. The suction thus applied will draw considerable secretion from the sinus. If after a proper time results are not obtained by these methods of treatment, or if complications ensue, radical operative measures are necessary. These measures have for their purpose establishment of permanent drainage of the sinus or the total exenteration of the sinus. The detail steps of these operative procedures are too lengthy to be discussed in this paper. Vaccine therapy has been questionable. There is practically always a mixed infection and it is impossible to say which organisms is the chief cause. An autogenous vaccine, if a pure culture can be obtained, is of value. Vaccines may be tried in persistent mild cases that do not warrant operation, or as a part of the after-treatment following operation.

POROKERATOSIS

FRANK W. CREGOR, M. D. AND FRANK M.

GASTINEAU, M. D.

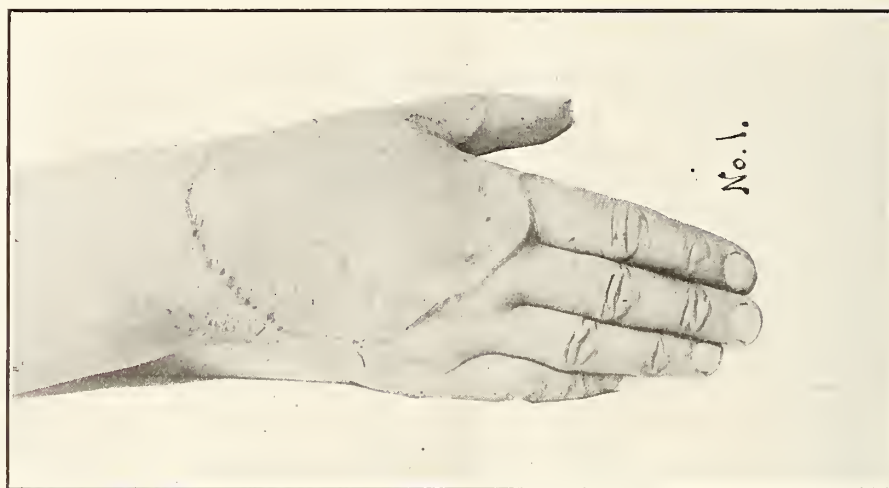
DEPARTMENT OF DERMATOLOGY—INDIANA UNIVERSITY SCHOOL OF MEDICINE.

The dermatological literature has been scant in the report of authentic cases of porokeratosis since Mibelli and Respligii simultaneously first reported cases of this condition in 1893. The following is the report of a case seen in our office:

History: Mrs. W. D., age 36 years, was referred to us by Dr. A. M. Cole of Indianapolis because of a lesion on her right hand. She was born in the Orkney Islands and came to the United States of America in 1912. She had diphtheria in childhood and influenza in 1918, otherwise her

was a brunette type. Scalp was normal; hair abundant; mouth negative; nails normal; heart and lungs were negative; liver and spleen not palpable. There was palpable anterior cervical adenitis; deep and superficial reflexes were present and active; skin was normal except over affected area. Blood pressure 130/70. Urine negative for albumen and sugar. Wassermann was negative. Von Pirquet was negative.

Local: On the dorsal aspect of the right hand there is a well defined, sharply limited area $3\frac{1}{2} \times 3$ inches in size extending well over the thenar portion. The skin of this area had undergone atrophic change and was thinned out. There are four minute white areas scattered about in the lesion. There are also several brownish discolored areas in the lesion. There are no hairs or evidence



Typical Lesion of Porokeratosis Showing Peripheral Wall and Atrophic Skin.

health had been good. She was married at the age of twenty-five years; had one healthy child. Her husband was also in good health and there was no history of skin disease in husband or child. Her family history was negative for any kind of skin disease or congenital defects.

At the age of sixteen years the patient noticed a small red spot appear on the dorsal aspect of the right hand. At this time she attributed it to the bite of an insect, but could not definitely state when the lesion began. The lesion became raised and spread gradually. For many months it had the appearance of a wart.

In the year 1912 the lesion began to increase in size and assume its present appearance. Since then the growth has been slow but steady. The only subjective symptom complained of was a burning sensation over the affected area when exposed to sunlight or wind. The lesion increased in size in the summer months and remained quiescent in the winter months.

Physical Examination: Patient was a well developed white woman in good general health. She

of perspiration in the affected area. The boundary between the patches and the healthy skin is definitely raised, keratotic in appearance and dirty gray in color. In the center of this ridge is a groove narrow and deep in some portions and shallow in others. The groove is more pronounced over the thenar portion. The ridge rises abruptly from the affected area and slopes off gradually into the normal skin. Sensation as to heat, cold, pain, and pressure was unaffected in the lesion. Hairs were noted to be present on the normal skin just beyond the edge of the ridge.

The patient was particularly interested in having the ridge destroyed. The wall was treated two or three times with acid nitrate of mercury over a small area with no results. In the hypothenar portion, two specimens were obtained for biopsy. These specimens included a portion of the normal skin—the ridge and the patch. A point of interest is that the tissue healed slowly and a small ridge developed in six weeks, later, at site of biopsy, in what was formerly normal skin. This was the only increase in size noted in the lesion.

In order to determine whether or not the sweat glands in the affected area could be excited to activity pilocarpine was administered hypodermically in physiological dosage. There was no perspiration noted in the affected area—though an

different portions of the lesion and in each case consisted of normal skin, a portion of the ridge, and the affected patch. The ridge with its depressed center was demonstrable. The change present seemed to be largely hyperkeratosis. The



Typical Lesion of Porokeratosis Showing Peripheral Wall and Atrophic Skin.

excess was demonstrable on the palm of the hand and forearms.

On numerous occasions scrapings were taken from the ridge and affected portion and transplanted on glucose agar and Saboraud's Media without result. The patient was kept under observation for six months without noting any improvement in the condition. X-ray therapy was administered on three occasions without any effect.

Microscopic: The section studied was from two

epidermis of the central portion is much thinned out as compared to normal skin. There were no hair follicles or sebaceous glands seen in the region of the ridge. The wall is formed by a marked increase in the corneum. There is also acanthosis of the prickle-celled layer. In the corium large collections of lymphoid cells are present; also there is dilatation of the blood vessels and the lymph spaces. There is atrophy as result of pressure. Some of the ducts of the sweat glands are plugged with horny material. Hyperkeratotic changes



High Power Showing Collection of Lymphoid Cells in Corium and Acanthosis in Prickle Layer.

involved sweat glands, sebaceous glands and hair follicles.

Comment: An excellent review of the literature was made by Wright in *Archives of Dermatology*, October, 1921. Since the disease was first recognized only about sixty cases have been reported. Hutchins in 1896 was the first to report a case of porokeratosis in the United States of America. Since then complete reports of cases were made by Gilchrist Wende, Heidingsfeld, and Wright. The etiology is unknown; some authors favoring an infectious theory and others classify the condition as a naevus, and others as verruca. In our case, history would favor an infectious theory, though the laboratory work was negative. A familial tendency is noted in the report of European cases. Reisner in 1896 observed that cases, were worse in summer and less active in

believe the correctness of the assertion of many prominent teachers and clinicians that congestion and inflammation of the middle ear always is associated with a like condition in the mastoid antrum and even the pneumatic cells. The reason for this association is evident if we consider the direct relationship that exists between the tympanic cavity and the mastoid antrum, with a continuity of structures and a well defined open passageway known as the aditus ad antrum. Therefore, with the development of congestion within the tympanic cavity, which congestion usually extends to the mastoid antrum, there may be symptoms of mastoiditis as evidenced by pain and tenderness in the mastoid region.

The degree to which the mastoid becomes involved in connection with an acute otitis media, depends in a measure upon the virulency of the in-



Biopsy of Lesion. Low Power Showing Wall with Crater.

winter. This was also true in our case. There is predilection in all cases for the hands and feet, and occasionally the mucous membrane is involved. In review of the literature it is noted that the onset may begin at any age though it is usually in early life.

As for treatment, complete excision is advisable when the lesion is very small. When the lesion is very large, treatment is without avail and the condition is surely one of the incurable dermatoses. The condition is interesting because of its rarity.

ACUTE MASTOIDITIS.*

THE DIAGNOSIS AND INDICATIONS FOR OPERATION

ALBERT E. BULSON, JR.,
FORT WAYNE, INDIANA.

Accumulated experience in the management and treatment of acute ear inflammations has led me to

fection but more particularly upon the anatomical peculiarities of the region, for dissections indicate that there is a vast difference in the size and permeability of the passageway between the middle ear cavity and the antrum. Therefore, it is conceivable that in those cases in which the passageway is narrow, a protective barrier to extension of the infection to the mastoid is provided by the congestion which effectually closes the passageway. On the other hand, a patulous aditus ad antrum may permit of as much involvement of the mastoid antrum as occurs in the middle ear cavity, and increasing evidence seems to indicate that there are many cases of active suppuration of the tympanic cavity with which is associated suppuration of the mastoid antrum which, with appropriate drainage through the tympanic membrane, fully recover. These particularly patulous passageways between the

*Read before the Fort Wayne Medical Society, April 10, 1923.

middle ear cavity and the antrum also give rise to the development of those rare cases in which the infection seems to pass directly through the tympanic cavity and into the antrum where it causes a mastoiditis and perhaps a suppuration that is independent of middle ear disease, and the only reason that this morbid process is confined to the mastoid region is because the natural drainage way into the tympanic cavity is closed by an adhesive inflammatory process that develops after the introduction of the infection.

The point to be emphasized is that the mastoid antrum and pneumatic cells, involved as they are to a greater or less extent in every case of acute inflammation of the middle ear, should not be subjected to the mastoid operation without the presence of symptoms and manifestations which give reasonable assurance to the clinician that recovery can not be expected without such interference. The judgment exercised in these cases will depend upon the experience and training of the clinician, and perhaps to some extent upon extraneous elements which prompt some clinicians to operate whether there are good and sufficient reasons for it or not.

The differences of opinion as to when and when not to operate are best settled by a painstaking analysis of the signs and symptoms that are presented in a large series of cases. Quite naturally, the clinician who opens every mastoid that presents symptoms of involvement of the mastoid will find sufficient pathology from his point of view to justify the operative procedures, and in all fairness it may be said that the reasonably safe course has been pursued when an abscess of the mastoid antrum has been drained by a typical mastoid operation even though recovery might have taken place by natural drainage through the middle ear. A surgeon seldom is justified in taking unusual chances, and it always is better to be safe than sorry, though in middle ear inflammation and its complications there is a place for real conservatism.

"Pathologically, acute mastoiditis always or nearly always, must follow infection of the middle ear, but clinically, cases are met with where the middle ear disease is so trifling that the hearing is normal and the membrane is of the natural appearance, and yet there is present mastoiditis with abscess formation. Indeed this escape of the middle ear has been reported even in cases which have developed lateral sinus thrombosis or brain abscess" (McKenzie). On the other hand, I am quite ready to endorse the statement of Dench that every case of acute middle ear inflammation is really a mastoiditis, and that a middle ear acutely inflamed and properly drained by early and free incision of the drum membrane recovers spontaneously. If this drainage, either on account of the severity of the inflammatory process, the particular topography of the mastoid in the individual case, or the extreme virulence of the infecting organism, is in-

sufficient, then a mastoid operation is indicated, or, as Dench says, it is necessary to drain a middle ear through a posterior incision rather than by an incision through the drum membrane.

In this connection it may be stated that suppuration has three drainage possibilities: through a perforated drum, through the eustachian tube, and through the aditus ad antrum to the antrum and mastoid cells. The usual way is through a perforated membrana tympani made artificially by the surgeon or by an ulcerative process from the middle ear. If the flow is free, if the perforation is early and the infection is not too virulent, or if the infection is not occasioned by improper or careless treatment, a complete cure usually results; but, if for any reason the outlet of the pus into the external ear is delayed or prevented, the pus is apt to continue forming and must drain through the other openings. There is no reason to doubt that pus frequently is drained through the eustachian tube, but any reliance placed upon this is most hazardous. The opening is far from the dependent portion of the middle ear, and the tubal caliber is occluded easily or soon becomes obstructed by the swollen mucosa. A most convenient drainage for the pus is into the antrum and the mastoid cells, thus extending the infection into these cavities and through them into adjacent structures. In this way the infection may extend from the middle ear to the meninges, the internal ear, the facial nerve, and even to the vascular system.

Involvement of the mastoid is characterized by certain signs and symptoms that are considered classical, and the more prominent of these will be discussed separately. The indications for operation will depend on a combination of clinical manifestations rather than upon any one sign or symptom. Just when to operate and the kind of operation to perform is the great problem in acute suppurative otitis media complicated by mastoiditis. The statement made by some radical operators that all cases presenting mastoid symptoms should be subjected to the mastoid operation is indefensible for there are many cases that do not need such interference and get well without it. In fact it is the experience of every operator who does much ear work that occasionally even the classical symptoms considered absolutely indicative of operative interference are not borne out by the operative findings.

Pain: The indication for operative interference which most influences the patient is the symptom of pain. The persistence of severe pain after free incision of the drum membrane, while suspicious, should not be considered as a positive indication for the mastoid operation. On the other hand, pain may be absent, even though mastoiditis may be present and increasing. Persistence of mastoid pain for forty-eight to seventy-two hours after the establishment of free drainage through the drum membrane should be looked

upon with suspicion, and be considered of real diagnostic importance when associated with other manifestations of mastoid involvement. The persistent mastoid pain due to impacted teeth, and irritation of the spheno-palatine ganglion from any cause, must not be overlooked in those cases that are puzzling because presenting little or no middle ear pathology.

Local Tenderness: This local tenderness is one of the most valuable signs, and yet it must be remembered that the mastoid may be exquisitely tender within twelve hours after the inception of an acute otitis media, and this early tenderness is not an indication for operation. In fact, this local tenderness may be elicited in nearly all of the cases of acute otitis media. This tenderness usually disappears gradually after tympanic drainage has been established. The tenderness in the beginning is usually most marked over the tip, and is less conspicuous or more often entirely absent over the antrum. It usually disappears in a few days. If it returns and becomes more marked over the antrum, then it should be considered a significant sign of an involvement that is relieved only by posterior drainage. In estimating tenderness, a comparison with the opposite side should be made.

Swelling of the Soft Parts Over the Mastoid Process: Usually, this indicates a periostitis with or without fistulae through the cortex of the mastoid process. Ice applications may cause a disappearance of the swelling, thus giving the impression that the infective process is subsiding, whereas it is increasing in extent. This swelling must be differentiated from the swelling that may be due to furunculosis or diffuse inflammation of the tissues of the external auditory canal. In the latter condition movement of the external ear is very painful whereas in the mastoid swelling from mastoiditis it is not painful.

Fever: Infants and young children usually present more fever than adults. A persistent high temperature, not accounted for by other causes, indicates the need for exploration. However, it should be remembered that some of the very worst cases of mastoiditis, with extensive breaking down of bony tissue, are unaccompanied by fever. Therefore, the absence of fever in itself is not a contraindication to operation. A sudden rise of temperature followed by a sudden fall with a chill or chilly sensation should make one suspicious of involvement of the lateral sinus and calls more urgently for the mastoid operation than the usual temperature curve. An exceedingly high temperature without a succeeding fall within a reasonable time points to the probability of pyemia, or septicemia, and naturally justifies immediate operation if there is any other evidence of mastoid suppuration present.

Otoscopic Examination: Dench claims that this is the most important of all the clinical signs in arriving at conclusions. Persistent bulging of

the upper and posterior portion of the drum membrane together with a sagging of the corresponding, adjacent bony walls is considered an almost pathognomonic indication for operation, though occasionally the rule will go wrong.

Bacteriologic Examination: Bacterial examination of the discharge from the ear is of no diagnostic value unless the canal first is rendered free from bacteria by liberal applications of tincture of iodine. Smears and cultures are then made from the pus which then is drawn out of the ear by means of a suction apparatus. The streptococcus in its different strains, especially streptococcus capsulatus, is always a dangerous organism and one which almost invariably demands operative interference by mastoid operation. Dench says that he has seen many cases of streptococcus capsulatus infection which came to mastoid operation from two to six months after the drum membrane had healed and become normal in appearance, and in these cases the otoscopic picture was sufficient at the time of examination to indicate the necessity of operative interference. The same is true of the pneumococcus when accompanied by the micrococcus catarrhalis. The pneumococcus alone or with the staphylococcus, or the staphylococcus, alone, produces a milder infection which usually is followed by rapid resolution.

Persistence of Discharge: A profuse discharge lasting more than three weeks usually indicates that the tympanic drainage is insufficient and if it is accompanied by continued or increasing pain in the ear or mastoid region, it is an indication for a mastoid operation. An acute inflammation of the middle ear which is going to recover after free incision of the drum membrane usually recovers within three to four weeks from its inception and oftentimes within ten days. If there has been a spontaneous rupture of the drum membrane and the discharge continues for five or six weeks, usually there will be found other accompanying evidences indicating the necessity for a mastoid operation. Sometimes the discharge will stop and the opening in the drum membrane will close. Most of these patients, however, are not cured. In this connection it should be emphasized that it is the cases of spontaneous rupture of the drum membrane that are apt to be most troublesome, for the drainage has come late and oftentimes is not adequate.

Generally speaking, an acute inflammation of the middle ear is a cry for drainage, and a prompt free incision of the drum membrane will save the majority of such cases from further complications. There are hundreds of cases of chronic otorrhea which never would have existed had they been operated on sufficiently early by free incision of the drum membrane or an early mastoid operation when indicated. The object of the operation is to prevent further mischief rather than to prevent immediate danger, and it is not good practice to wait for dangerous symptoms.

I am in hearty accord with Phillips' statement that there is but little doubt that the enthusiasm of some otologists has carried them beyond reasonable limits in operating upon cases of acute mastoiditis. Of the cases of acute purulent otitis media with tenderness over the mastoid antrum, and even more general mastoid tenderness, when seen early and placed in bed for observation, drainage and local treatment, more than fifty per cent. recover without operation except wide and free incision of the drum membrane. I also am in hearty accord with the statement of Emerson, of Harvard University, who says that seldom should a case of acute mastoiditis be operated before the lapse of eight to ten days from the onset of the middle ear disease. On the other hand, I am not unmindful of the fact that many patients still are deprived of their hearing, many are suffering from chronically discharging ears which are a menace to life, and many lives still are sacrificed as a direct result of either delayed operation or neglect to operate at all.

Roentgenoscopic Examination: The value of roentgenograms in the early stages of mastoid involvement, as has been pointed out by Dench and others, is questionable in the extreme. Cases of acute otitis media often show a cloudy mastoid within the first ten days and yet go on to complete recovery without operative interference. It should be remembered that pus and granulations obstruct the passage of the rays, and that the destruction of the intracellular walls are shown by the rays, but aside from indicating the size and position of the antrum, cells and relation of the contiguous structures, the indications presented by the roentgenogram already have been determined by other and more reliable signs and symptoms. The roentgenographic evidences often are confirmatory, but should not alone be depended upon, and, in fact, to operate upon roentgen ray findings alone means that many mastoids will be opened unnecessarily. Roentgenograms are certainly an operative guide, but are only helpful in arriving at conclusions concerning operative interference. Stereoscopic pictures are to be preferred.

Blood Picture: The leukocyte count, which always is increased as in all other acute infections not involving the blood stream, varies from eleven to eighteen thousand. The polymorphonuclear neutrophils are increased at the expense of mononuclear leukocytes which are decreased. If the mastoid abscess is complicated by a bacteremia by way of the lateral sinus or the smaller vessels of the mastoid process, the leukocytes are increased, often from twenty-five to thirty thousand or even higher. The blood picture when associated with other classical signs and symptoms is a valuable indication in determining the necessity for operative interference.

SUMMARY

First, it is my belief, based upon experience, that every case of acute otitis media,

complicated with at least congestion if not purulence of the mastoid antrum and perhaps the pneumatic cells of the mastoid, may require posterior drainage, but that such operative interference is less likely to be necessary if an early and free incision of the drum membrane is made.

Second, that while establishment of drainage through the drum membrane will cure a large percentage of cases of acute otitis media, even when accompanied by marked mastoid symptoms, yet there are a certain proportion of cases, manifested by almost pathognomonic signs and symptoms, which must have a mastoid operation in order to give the patient the best chances for recovery.

Third, that a mastoid operation seldom is indicated until at least eight to ten days has elapsed since the onset of the middle ear inflammation.

Fourth, that the decision to operate should not be based upon any one symptom but upon the general clinical picture made up from a preponderance of the signs and symptoms already described.

Fifth, that with the decision to operate the operation should be thorough, and promptly performed, as delays are not only dangerous in tending to lead to chronicity and impairment of hearing, but are a menace to life as well.

INSULIN

DOCTORS GEORGE McCASKEY, CHARLES G. BEALL
AND MILES F. PORTER, JR.
FORT WAYNE, IND.

Until the recent advent of insulin the treatment of diabetes mellitus was substantially summed up in the words "carbohydrate restriction." This was carried to its optimum limit by Allen, under the designation of the "starvation treatment of diabetes," and remained at once the most brilliant and effective method of treatment. Under its influence the mortality from diabetes had been enormously reduced and thousands of diabetics are living today in comparative health, albeit with more or less sharply restricted diets, who would otherwise be dead.

In all progressive cases of diabetes, however, the limit of relief was sooner or later reached, and the disease pursued its downward course. There was really no positive therapy worth the name.

Through a long series of experimental and pathologic work of Von Mering and Minkowski the dependence of diabetes upon pancreatic disease, and finally, more specifically, upon disease of the islands of Langerhans had been fully established. There was no longer any doubt that normal carbohydrate metabolism was dependent upon a hormone formed within the islands of Langerhans and discharged directly into the blood; and that diabetes as well as milder grades of lowered tolerance was directly traceable to a deficiency of this hormone.

The foundation was thus laid for a rational therapy which it would seem proceed along one

or two lines. First to improve the function of the pancreatic tissue responsible for the formation of the hormone, or second to supply this hormone or its equivalent. An inquiry into the pathology of the structure concerned indicated that the lesions found were due partly to infections of various sorts acting upon the pancreas, and partly to constant overstrain due to excessive demands made upon these tissues by an absolutely or relatively excessive carbohydrate intake requiring an excessive quantity of the hormone.

The infections produce fibrotic changes involving all pancreatic structures including the islands of Langerhans which lower the capacity of the pancreas to deal with carbohydrates. Thus is explained the frequently observed clinical fact of lowered carbohydrate tolerance following general infections. This is the initial stage of diabetes mellitus. After partial destruction of the islands by infections the remaining island tissues are able to do the work required of them only by more or less over-strain which leads to degenerative changes of a hydropic character, thus still further lowering the efficiency of pancreatic function, accentuating the overstrain and hastening the degenerative changes above described. Thus we have what we conceive to be a perfectly plausible and logical explanation of the origin and progress of diabetes mellitus and one which fits with precision all the clinical facts thus far known with reference to this disease. A clear conception of the fundamental facts above outlined will furnish the best public basis for an estimate of the clinical value of insulin in the treatment of diabetes, and furnish the answer to the often asked question as to whether or not diabetes can thus be cured. The term "pancreatic diabetes" is now known to include all types. In short to understand a case of diabetes we should understand the pancreatic pathology in that particular case. Remembering that infections and overstrain are the major factors in practically all cases, the rational purposes and reasonable expectations of insulin treatment become easily apparent. The thing that really happens when insulin is introduced into the circulation is that a definite quantity of the pancreatic hormone has been added to the circulation and that this will oxidize a definite quantity of carbohydrate. The oxidizing power of the hormone placed upon the market has been accurately standardized although different lots have somewhat different value. Each unity will oxidize from one to four grams of carbohydrates. This seems like a rather wide variation, but one which we believe has been largely overcome and in any event can easily be compensated by the clinical method. Now it is perfectly obvious that insulin has no effect whatever directly upon the pancreas, and therefore cannot directly cure diabetes. It may correct the morbid chemistry of the blood and urine by increasing the oxidation of the carbohydrates,

by supplementing the deficient pancreatic hormone and relieving the overstrain of the pancreas.

Whether the result will be transient or lasting will depend altogether upon the recuperative power of the pancreas and the careful restriction of carbohydrate diet within the limits of pancreatic function. Under these conditions the pancreas may largely recover its function and the patient be able to metabolize with reasonable care enough carbohydrates to meet the actual requirements of a comfortable existence. This is exactly what happened in hundreds of cases with the starvation treatment although insulin makes it possible "to splint" the pancreas, so to speak, much more effectually, thus giving it more complete rest with a correspondingly better opportunity for improvement of its function.

The administration of insulin should be preceded by a careful metabolic study of the patient, preferably in a hospital. It is essential first to determine the patient's carbohydrate tolerance and the degree of glycosuria upon a "basal diet". Such diabetics as remain aglycosuric upon a diet adequate to meet the demands of ordinary life are better left upon simple dietetic treatment without insulin. According to the "Insulin Committee" of Toronto about 75% fall in this class. The remaining 25% will need the help of the pancreatic hormone. It should be given first in small amounts and more conveniently in one or two doses daily since its administration is hypodermatic or intravenous. The carbohydrate corresponding is added to the meal immediately following the insulin. For the first few days it is wise to err on the side of giving too much carbohydrate at the meal rather than too little, to avoid the possibility of a too sudden lowering of the blood sugar. The amount of carbohydrate ingested is gradually increased and the dose of insulin correspondingly providing the urine shows no sugar and the blood sugar is not too greatly increased; until a well balanced palatable diet adequate to maintain weight and to carry on moderate exercise is possible. It must be borne in mind that the use of insulin does not obviate the necessity for pancreatic rest—consequently slight undernutrition and the restriction of carbohydrates remain essential in the treatment. It is doubtful if it is ever wise to attempt anything like a normal carbohydrate intake even with the aid of insulin. The administration of insulin is not unattended by danger of overdosage resulting in a fall of the blood sugar below the normal level and manifesting itself clinically by extreme weakness, palor (or flushing), sweating, tremulousness, sometimes mental disturbances and unconscientiousness. Fortunately the symptoms of overdosage while severe are really controlled by immediate carbohydrate ingestion, for example, three ounces of orange juice, teaspoonful sugar in water, etc. It is obvious that after his initial

study the patient will have to carry out the insulin treatment himself. Careful instruction in its aseptic administration, limitation of its use and the signs and treatment of overdosage, are consequently essential. As yet we must conclude that insulin has no curative value—that it merely performs vicariously the function of the diseased islands of Langerhans. However, it is well known that prolonged “dietetic rest” will often result in moderate increase in carbohydrate tolerance and it is conceivable that the use of insulin will enhance this beneficent influence upon the pancreas by increasing the completeness of the rest.

In the minds of the lay public insulin looms large as the road to freedom from dietetic bondage—as a “cure” of the disease, and too great care cannot be exercised in making clear to these patients that insulin merely helps to make his dietary restrictions somewhat less severe, and that its indiscriminate and ungoverned use is harmful.

The accompanying table gives a summary of twenty cases.

TABLE 1.

Summary of patients treated with Insulin.

AGE UNDER 20 YEARS

Age at Onset, Years	Duration of Disease, Years	Treatment with Insulin, Days	Units, Daily	Gain in Weight, Pounds
11	1	55	15	2
10	1	128	15	10
16	$\frac{1}{4}$	6	10	2
13	4	133	20	7

AGE OVER 20 YEARS

58	10	2-3 hrs.	—	Died
34	3	35	10	
32	5	45	25	10
56	5	46	10	
52	6 wks.	40	20	
55	2½ mos.	6	10	
72	16	70	30	Died
58	3	30	20	5
60	8	20	20	3
55	5	60	30	—20
42	4	70	20	6
59	7	50	25	0
57	14	50	35	0
62	6	40	35	0
50	2	35	10	—26
41	8	25	30	15

The individual is made decidedly more comfortable and can be kept on a quantity of food fairly compatible with his or her desires, a very important factor, especially in children. The diet is just as important a factor in the treatment as it ever was. The daily or twice daily hypodermic injection has not proved to be particularly annoying. Our experience with insulin confirms the published reports of other observers.

CANCER OF THE ESOPHAGUS

REPORT OF CASE TREATED WITH RADIUM AND X-RAY: AUTOPSY: REMARKS.

MILES F. PORTER, M.D., F.A.C.S.

FORT WAYNE

W. P. C., male, age 70 years; first consulted me February 20th, 1922, for difficulty in swallowing which first manifested itself three months prior to his visit. His general health was good and his previous history unimportant. He was a very intelligent man and said he would consider himself well were it not for the difficulty in swallowing. An examination led to a diagnosis of esophageal cancer, and he was treated with radium, 50 mg. with one mm. brass and one-half mm. aluminum filter being used each treatment. The radium was placed accurately in the grasp of the growth. All applications were of three hours' duration. The first two treatments consisted of two three-hour applications with a forty-eight hour interval. The remaining treatments consisted of three three-hour applications with the same interval. The patient was given four treatments, amounting in all to ten three-hour (thirty hours) applications.

To the last radium treatment was added x-ray treatments which were sandwiched with the radium applications. In all he received three x-ray treatments—one anterior, one posterior and one lateral exposure. Each treatment consisted of one hour exposure, focal distance 50 cm., spark gap 12½ inches, 5 ma, filter 1 mm. aluminum and ¾ mm. copper. The patient, perhaps largely because he felt himself to be in such good health, was reluctant to believe he had a cancer and could not be induced to commence treatment earlier. As it was his treatment was instituted eleven months after his first visit to a doctor and fourteen months after he first noticed difficulty in swallowing. One cannot help feeling, in the light of subsequent developments, that this patient might have been saved had he consulted a surgeon when he first noticed trouble in swallowing and had followed his advice promptly.

In the time immediately preceding the combined treatment by radium and x-ray the patient had gained four pounds in weight, his color and appearance had improved, and he was having slightly less difficulty in swallowing. Within four days after the combined treatment was inaugurated the patient complained of feeling weak. He fell once while walking about in the house. Thirty days after the last x-ray exposure he died suddenly, in bed, and apparently without a struggle. He was awake when his wife got up, and at her suggestion concluded to rest a little longer in bed, though he said he felt “all right” and took some nourishment. Three hours later on calling him for his breakfast he was found dead.

Autopsy revealed a carcinoma involving the lower end of the esophagus with regional metastasis in the mediastinal glands. No other metastasis could be found, and no specific cause for the sudden death.

Pathologist's Report: "The growth near the cardia shows very distinctly the effect of the radium, the mass being a mere skeleton of delicate connective tissue, with here and there scattered nests of vacuolated cancer cells. The metastatic nodule three inches higher up shows no effect of radium, there being only a few vacuolated cells. The growth is a primary adeno-carcinoma."

Remarks: This case emphasizes the generally accepted belief that cancer of the esophagus is more common in the male (four times, according to Sutton); that those cancers of the lower end are usually of the glandular type while those of the upper two-thirds are squamous-celled; and that metastasis, other than regional, occurs relatively late.

This is the second case in the writer's experience in which rapid failure of vital powers ending in death promptly followed intensive x-ray treatment for mediastinal cancer, and he has the feeling that death in both was accelerated by the effect of the x-ray on the cardiac muscle.

The histologic picture seems to show the destructive effect of the radium on the cancer cells in the immediate vicinity of the application, and this perhaps to offer a slight hope that these cases might be cured by this agent if treated early. This hope is strengthened too by the late metastasis. However, the depressing fact remains that these growths are usually symptomless until obstruction sufficient to cause difficulty in swallowing occurs, and this means that their early recognition is not possible. Hanford¹ says that "by dilatation and the proper application of radium, gastrostomy is avoided" in cancer of the esophagus. Lilienthal² and others have shown that esophageal resection is possible, but to be successful in carcinoma the operation must be done while the disease is still localized. Those interested in esophagoplasty will find an excellent summary for the subject by Allen in the *Annals of Surgery* 1922, Vol. 76, page 157.

¹Journal A. M. A., 1922, Vol. 78, Page 10.

²Annals of Surgery, 1922, Vol. 76, Page 333.

CHIROPRACTIC PHILOSOPHY*

MALFORD W. THEWLIS, M. D.

PROVIDENCE, R. I.

At Davenport, Iowa, there is a school which has become the most gigantic institution in the world for the teaching of mountebankery and which commands attention as one of the most pre-

tentious pieces of fakery we have ever witnessed. It gives men with no education a pseudo-medical veneer which enables them to plunder the sick; it teaches them to despise the serious works of our greatest masters, to rely upon the appalling ignorance of our masses, to use every means of salesmanship in order to reach them, to spread a venomous propaganda against the medical profession; this school boasts of "the prettiest printery in America," of a powerful radiophone which broadcasts lectures on chiropractic "education" every afternoon, and of an organization utilizing every political means to gain legal recognition of their sect in the various States of the country.

We refer to the Palmer School of Chiropractic, if not interesting at least a highly entertaining organization, the parvenu at its "fountain head" is depicted by Hugh Harrison (?) as the "greatest healer of the sick since Christ." Harrison gives you a complete biography of "B. J." (Palmer), as his devoted disciples call the man. He tells us that Palmer's favorite author is Elbert Hubbard. "I don't care much for the average writer, because he is not practical, and their writings do not apply to everyday life," says the wizard of Chiropractic. A glimpse of "B. J.'s" picture, with his long hair and beard, is disquieting; he seems ready to play the leading role in the Passion Play.

Day and night, under the very eyes of the medical profession, laws are being enacted which allow these charlatans to practice medicine on a level with physicians, to treat all kinds of diseases, including contagious ones, to sign death certificates, and there are laws which permit licensing boards to examine the applicants. There are now 5,000 chiropractors in the field and Palmer says, "I look to see the time when this institution will graduate 25,000 students a year." There are 3,000 students in the Palmer School of Chiropractic now; as Kipling would say, the men are "machinely crammed."

Some time ago in Paris, a few Americans opened a Christian Science healing establishment and within a few hours the police closed its doors. There, at least, no one can treat the sick without a medical education. In America, it is different. There is no country in the world where health is exploited for commercial purposes as it is here. Any freak with a beard and a flow of sparkling language seems to appeal to the people.

Chiropractic is defined as "the philosophy, science and art of things natural, and a system of adjusting the subluxated vertebrae of the spinal column, by hand, for the restoration of health." It was founded in 1895 by the late D. D. Palmer and the first chiropractic adjustment was given in 1895 to a man of impaired hearing. "An analysis of his spine disclosed a pronounced subluxation in the upper region of the spinal column. By adjustments the misaligned vertebra was restored to its normal relations and soon the man

*This article which we reprint from the *Rhode Island Medical Journal*, of May, 1923, gives some idea as to how, through advertising, the chiropractic cult grows and gains favor. We never can stamp out this monumental fraud until we educate the public and combat the effects of such advertising as described.

could hear as before." B. J. Palmer is the developer of Chiropractic, and, according to his biographer, Hugh Harrison, "his only education had been in the School of Experience. He had never finished high school. . . . Three live rats had chewed off the thread of his educational career. He brought the rats to school in a cigar box, one of his typical boyish pranks, and the principal, J. R. Baldwin, expelled him. The same teacher in later years enrolled in the Palmer School. He studied under B. J. Palmer and became a practicing chiropractor. The boy he expelled had taught him a science which he valued above all his learning." A powerful ray of light is thrown on Palmer's teachings by his dissertation on germs. "The germ is an established fact. That he is, that he exists, is indisputable. You have rats around garbage barrels, too, but they don't put the garbage there. They're scavengers, drawn by the scent of decay. So are germs. There is not a single germ in the world that ever caused dis-ease. Physicians say there is. They try to wag the dog by the tail."

The Palmer School of Chiropractic does not even require a common school education for admission. They demand 18 months of study, 4,103½ class hours, in order to give a degree of D.C. (Doctor of Chiropractic) and Ph.C. (Philosopher of Chiropractic). The tuition is \$450; they have a faculty of about 36 and teach philosophy, anatomy, technique, symptomatology, histology, physiology, gynecology, neurology and chemistry, general chemistry, orthopedy, hygiene and public health and spinography. One of the most important courses is that of salesmanship, which is conducted by "an experienced advertising and sales-manager." It teaches the chiropractor how to "sell his goods, and to keep himself sold." (*Sic.*) They have free clinics, fraternal organizations, a band, an orchestra and a barber shop. The dean is an M.D. besides a chiropractor and "offers to the student body and their families every possibility of high class medical attention when such is necessary. Maternity cases are not handled by chiropractors and should such services be needed while our students are in attendance here, they have in Dr. Hender a man of exceptional ability along this line, whose record is his best endorsement." Yet Palmer says "the M.D.'s and the Chiros will never mix."

Now, may I ask you to indulge in the perusal of a few phases of chiropractic propaganda. I wish to show how Palmer spreads his teachings. First, the printing presses supply chiropractors with all kinds of material for their advertising campaign. "Nowhere else can the public obtain the authentic principles of Chiropractic as well as through the publications issued by our printery; in no other way would the millions of diseased and suffering people ever have heard of Chiropractic except through the herculean efforts

of our printery. Our printery is the power behind the bright light of truth, which throws its protecting rays over a world filled with earnest seekers after health."

By means of a masterpiece of trickery, Palmer is now reaching the firesides of thousands, at a very small cost. This is done by means of a radiophone which broadcasts messages daily. Is it done officially under the auspices of the Palmer School of Chiropractic? No, it is a camouflage. They are using the medium of one of our most honored and trustworthy fraternal organizations. Letters are sent by the grand lodges of this fraternity to every lodge under its jurisdiction, informing the members that radio messages will be broadcasted on "The Brotherhood of Man." The secretary of the lodge is expected to read the letter to members in open meeting. The station is WOC, which happens to be Palmer's school, and the message is not delivered under the auspices of the fraternity above mentioned, but of Palmer. The scheme appears innocent, singers, teachers, lecturers and "celebrated" persons transmit their messages, to say nothing of the government weather forecasts and trade reports, which are daily cast forth. *Timeo Danaos et dona ferentes!*

In Palmer's entrance into the home we are dealing with a new wooden horse of Troy. Thus far, the messages do not refer to chiropractic, but Palmer's catalogue reveals the truth. One sees that in addition to the above messages, Palmer broadcasts "educational matter on the subject of chiropractic each afternoon at 3:30, Central Standard Time, and to these talks chiropractors invite their patients to listen in that they may learn more about the science. A copy of our printed program is furnished free each week on request." The catalogue further reveals:

"As a Palmer School graduate, can't you see the advantages of Palmer radio broadcasting? Just picture yourself as a practicing chiropractor, being able to invite the prominent people of your city to your office each afternoon or evening to be entertained by your radio set. Imagine the many new friends and patients you will acquire by this courtesy. All this can be yours by simply having a receiving set installed in your office, the cost of which will be hardly more than that of a phonograph."

Almost anything can be sold through clever advertising and Palmer realizes it. The medical profession is too engrossed in its serious work to dabble in medico-politics. It has always been considered beneath the dignity of the medical profession to use political influence. Our requirements for a medical education increase every year, as they should, our medical schools have a high standard throughout the country. We shall probably see the day when physicians will be forced to obtain a new license each year (New York has a bill before its legislature now for this purpose) and perhaps the time is not very remote

when physicians will be re-examined yearly, and those who are inefficient forced to drop out.

While all these advances are being made in scientific courses, the pseudo-medical cults are allowed to practice medicine on the same ground as physicians. Preliminary education is of no moment as far as they are concerned and a man or woman can get a "degree" after eighteen months of "study."

For the good of humanity there should be a law—as there is in France—explicitly stating that no one can treat disease without a medical license, that each applicant shall pass the same board, such as the Board of Regents of New York, or the State Board of Rhode Island. There should be no other examining boards to cover these cults. In France, it is impossible to get a license to practice medicine without taking the regular medical course at a faculty, besides spending two years in hospital work and then passing a very rigid examination.

It has been said that the best method to combat

the healers was to educate the public. The public will not be educated, it loves mystery, it has little regard for the discoveries of science. We all hear of the radiovibration of Abrams, the "adjustments" of chiropractors, the poison of the Heloderma monster as a cure for locomotor ataxia, the Friedmann serum for tuberculosis, to say nothing of the gentle cooing of Coué. Such mindstuff will always fascinate the readers of the Sunday papers, but it is puzzling to realize that some really educated people also "fall in" for these medical fads.

(The foregoing is interesting in the showing of the versatility and insidiousness of the publicity management of the Palmer School of Chiropractic. That said management should, however, have the audacity to so openly direct its efforts toward what is, without question, the greatest humanitarian and semi-ecclesiastical brotherhood that the world has ever known, is indeed a presumption that is as marvelous as it is graceless.—Ed.)

CANCER OF THE URINARY BLADDER CURED BY RADIUM

This case is reported by Curtis Burnam and George Walker, Baltimore (*Journal A. M. A.*, June 9, 1923), because an infiltrating bladder cancer was healed and has not returned in more than seven years. This healing was accomplished by transabdominal radium radiation. One mild intravesical topical application of radium was made, but its influence, if any, was insignificant. The case was observed from October, 1914, to March, 1923. The inference from this case, and it does not stand alone, is that in the treatment of cancer of the bladder the employment of gamma radiation from the exterior of the body is very valuable. It is also susceptible of wide application, as it can be combined with surgical operation and with topical application of radium, as well as with implantation of bare emanation tubes. It is possible, if adequate radium is available and proper use is made of it, to bring any desired amount of radiation to any part of the bladder without serious injury to the skin.

SUPRACLAVICULAR DEPRESSIONS IN THE DIAGNOSIS OF EARLY PUL- MONARY TUBERCULOSIS

H. A. Bray and A. H. Duerschner, Ray Brook, N. Y. (*Journal A. M. A.*, June 9, 1923), made a comparative study of the incidence, distribution and depth of the supraclavicular depressions in 153 healthy adults and 150 patients with incipient pulmonary tuberculosis. At the same time, an attempt was made to discover methods of differentiating the depressions found in health and in disease. The evidence obtained shows that

there is a definite relation between nutrition and the presence and absence of supraclavicular depressions. The depressions are influenced by the size, shape and position of the clavicle. There is a striking similarity in the incidence, distribution and depth of supraclavicular depressions in health and in early tuberculosis. No method was discovered for differentiating depressions in health from those in early tuberculosis. Attempts to correlate depressions with the site and extent of the lesion in early disease have proved impracticable. Although depressions occur with early disease, they probably are not due to the pulmonary lesion. Except possibly in rare instances, supraclavicular depressions are of questionable value in the diagnosis of early pulmonary tuberculosis.

THE ELECTROCOAGULATION METHOD OF TREATING DISEASED TONSILS

Frank J. Novak, Jr., Chicago (*Journal A. M. A.*, June 23, 1923), employed this method in 100 cases. Without exception, the patients had a stormy experience beginning a few hours after operation. Pain was uncontrollable save by liberal doses of morphin. There was extreme difficulty in swallowing, much greater than after tonsillectomy. The palate was extremely edematous, and speech was impossible. The intensity of this reaction persisted through the sixth day. Whatever logical basis electrocoagulation of diseased tonsils may have, from a theoretical standpoint, is far overshadowed by the unsatisfactory results in actual practice. Novak believes that the method is entirely inadequate, inaccurate and unsatisfactory, and cannot in any manner compete with the accepted present-day methods of tonsillectomy.



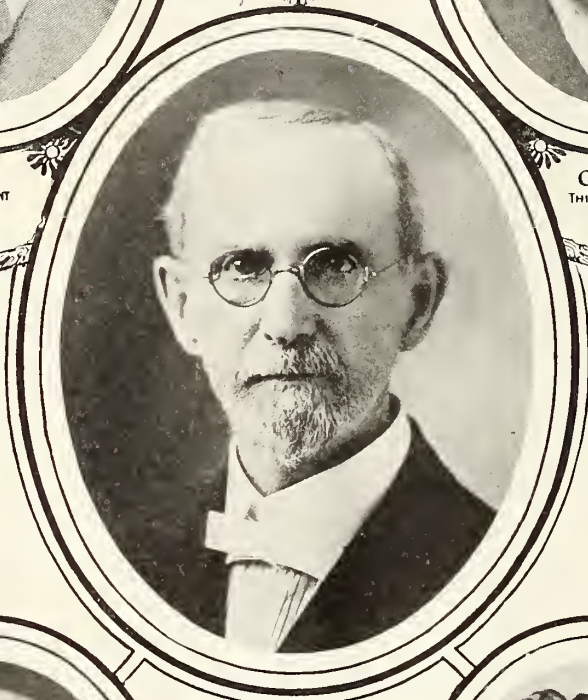
CHARLES H. GOOD
HUNTINGTON
President Indiana State Medical Association
1923



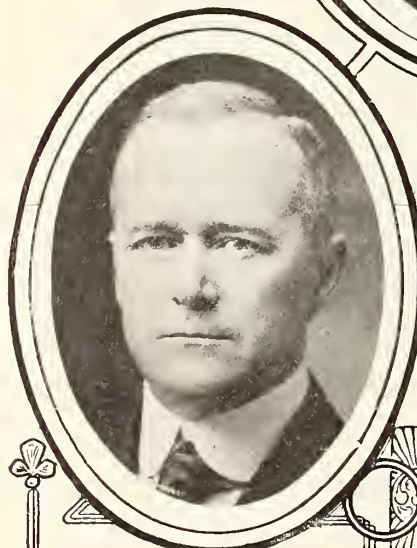
J.H. REED
SECOND VICE PRESIDENT
LOGANSPORT



CHARLES S. BRYAN
THIRD VICE PRESIDENT
VINCENNES



WILSON T. LAWSON
FIRST VICE PRESIDENT
DANVILLE



A.P. ROOPE.
CHAIRMAN SECTION ON SURGERY
COLUMBUS.



C.J. ADAMS
CHAIRMAN EYE, EAR, NOSE AND THROAT SECTION
KOKOMO



B.R. KIRKLIN
CHAIRMAN SECTION ON MEDICINE
MUNCIE



MERRILL DAVIS
SECRETARY SECTION ON SURGERY
MARION



E.M. SHANKLIN
SEC EYE EAR NOSE AND THROAT SECTION
HAMMOND



CHAS. BEALL
SECRETARY SECTION ON MEDICINE
FORT WAYNE

THE TERRE HAUTE SESSION

On September 26th, 27th and 28th, the Indiana State Medical Association will meet in annual session as the guest of the Vigo County Medical Society, one of the largest and most active county medical societies in the state. The arrangements for the meetings and the program have elicited the hearty and enthusiastic support of the members of the county society and bespeak one of the most interesting sessions in the history of medicine in Indiana.

Terre Haute is advantageously located, being on the lines of the Pennsylvania Railroad and the Big Four, seventy-two miles west of Indianapolis. The convention city is made accessible to the northern part of the state by the Terre Haute and Logansport division of the Pennsylvania, and the Chicago and Eastern Illinois Railroad. Terre Haute is accessible to the southern part of the state by the following railroads: The Evansville and Terre Haute, the Chicago, Milwaukee and St. Paul, and the Evansville and Indianapolis. Terre Haute is also connected with Indianapolis by traction lines and these extend in a network about Terre Haute to Sullivan, Clinton, Paris, Illinois, and intermediate points.

Terre Haute was laid out in 1816. It had been a French trading post, between Vincennes and Fort Dearborn (Chicago) and the names of the earlier families attest to these now romantic connections. North and south of the city the tow-paths of the old Erie canal are still visible. Fort Harrison Country Club's spacious grounds now stretch over the area once known in the Indian wars as Fort Harrison and which was closely associated with the history of the passing of the territory from the Indians to Governor Harrison. George Rogers Clark led his soldiers over this county, when in 1786 he headed an expedition up the Wabash. The French and Indian influence in the Wabash Valley terminated with the expeditions of General Scott and Wilkinson in 1791 and 1792. It was in 1809 at Fort Wayne that Governor Harrison made the treaty with the Indians which ceded to the white man

the empire which was later to be known as the Wabash Valley and which today is one of the most fertile and prosperous sections of North America.

Just as in the present day, the leasor thought that there might be some complications with the lessee, and Fort Harrison was built in 1811, General Harrison concluding that some blockhouses might make the argument over the realty transfer convincing. Subsequent history endorses the general's foresight, as all students of Indiana history now know. The battle of Fort Harrison was on Friday, Sept. 4, 1812, and the eventualities now associated in history with the names of William Henry Harrison and General Zachary Taylor recur to the visitor who now views the transition of Fort Harrison from a happy hunting ground to a place where such lethal weapons as are now used are known as niblicks, brassies, mashies and such amiable things.

Terre Haute's population according to the last census was 67,000. It is now estimated at 75,000. Her bank clearings are the second in the state. Her school enrollment is over 12,000 and she is the seat of the Indiana State Normal School, one of the most valuable assets which Indiana can claim.

Terre Haute has fifty miles of paved streets, 300 miles of paved sidewalks, and 90 miles of sewers. There are 14,000 people employed in her industries. Within the fifty-mile radius the railroads which enter the city traverse 921 miles of territory. She ranks second in the state in the amount of fire insurance carried. Her courthouse cost \$500,000, and was built within the appropriation. There are ten fire houses with a force of eighty men. There are nineteen pieces of equipment, all of which are motor driven. The postal force numbers ninety employees and the annual business of the office is \$1,900,000. Her street car system covers twenty-eight miles. No deviation ever has been made from a five-cent fare, and the company sells dollar weekly passes, this city being one of the first and one of the most successful in this transportation innovation.



CHARLES N. COMBS
SECRETARY-TREASURER
Terre Haute

The Wabash river bridge was built at a cost of \$280,000. One of the largest enameling plants of the world is located here. Her annual retail business amounts to \$30,000,000. The briefest exploration about her environs will impress one with Terre Haute's tremendous shale and clay industries. These industries employ about 800 men and have an annual pay roll of \$3,000,000.

Some distinctive features regarding Terre Haute present her as a versatile neighborhood of graces, talents and resources sufficient to intrigue the interest of anyone. Her claim to industrial interest is of course her cheap coal, lying as she does in the heart of the western Indiana coal fields. It is estimated that 2,110 square miles of coal land lies adjacent to the city. These operations are directed from Terre Haute, and the enormous payrolls and financial matters pertaining thereto boom Terre Haute banks and kindred interests. The average monthly payroll in the mines about Terre Haute is \$3,500,000. Her factory payroll here is said to be \$14,000,000 annually. Terre Haute takes great pride in her inexhaustible supply of good water. The supply is never taxed, and its purity and wholesomeness have been attested to by many scientific men.

Terre Haute is but forty miles from the center of population of the United States. It is at the intersection of two great national highways, the National Old Trail and the Dixie Bee Line. She has fifteen building and loan associations with assets of \$15,000,000. Her bank resources are \$37,000,000.

Terre Haute has the largest indoor vegetable producing plant in the world, with twenty acres under glass and an investment of \$600,000.

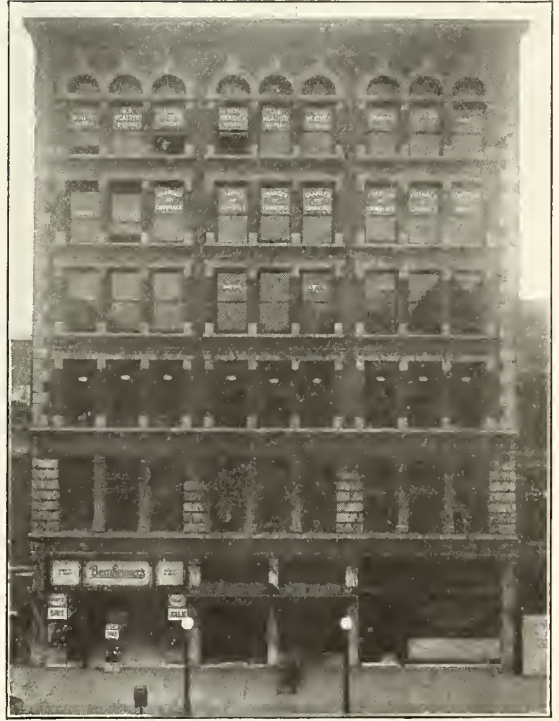
SCHOOLS

She has two high schools, twenty-six grade schools, the Indiana State Normal, the Rose Polytechnic Institute, the latter one of the most highly recognized scientific schools in the country. Six parochial schools and a number of business colleges and private schools.

PARKS

Terre Haute has twelve parks under improvement. Most of these have been acquired recently. The total park acreage is 550 acres. The principal park is Collett, a gift to the city by the late Josephus Collett and one of the largest and most attractive parks of its kind in the state. Steeg park, at Fourteenth and Wabash Avenue, affords a refreshing place of recreation, and the same can be said of Vorhees, Thompson, Herz, and Memorial Parks. One of the largest projects now is the Stadium Park, comprising the site of the old fair grounds, which in a year or two will be the location of a \$400,000 public stadium. In Fairbanks Park, the gift to the city by Crawford and Edward P. Fairbanks, a large public swimming pool now is being constructed.

A memorial is under way to the late Paul Dresser, the songster, a native of Terre Haute and the author of "On the Banks of the Wabash," now the state song, and a refrain reminiscent of Terre Haute, Vigo County, Indiana, and all that these names imply. This memorial will be



TRIBUNE BUILDING
Terre Haute

erected at the west side of the Wabash river bridge, and the intention is to bring the remains of the late songster home for burial, on the banks of the placid stream he knew so well.

CIVIC MATTERS

Terre Haute has a large and influential Chamber of Commerce. The general offices are located in the Tribune Building and visitors to the convention will be welcome there.

The Fairbanks library, the gift to the city by Crawford Fairbanks as a memorial to his mother, stands at Seventh and Eagle streets, a handsome gray stone building of Grecian lines, and its facilities as a library are in keeping with its impressive physical appearance.

The Y. M. C. A. and Y. W. C. A. have large enrollments and take a valuable activity in civic and religious interests. Over one hundred branches of the various fraternal and secret organizations are maintained here. There are excellent theaters, several summer amusement parks about the city which provide this type of recreation, and her public forum and winter musical



ST. MARY'S OF THE WOODS
Terre Haute



ST. MARY'S OF THE WOODS
Terre Haute

courses bring to the city the most celebrated leaders in the various arts. The Women's Department club's home on Cherry street near Seventh is one of the most imposing clubhouses in the state. The Masonic temple, Shriners' temple, the Knights of Columbus and the Young Men's Institute all add to the development of such interests as these represent.

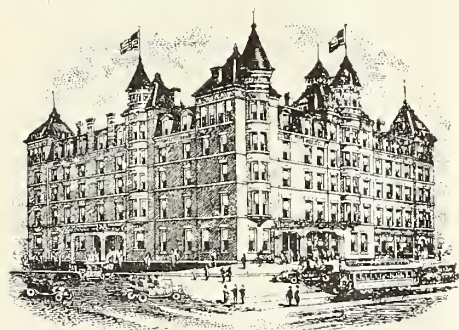
CLUBS

The Terre Haute Rotary Club meets Thursday noon at the Hotel Deming. The city has a large and flourishing Rotary Club, and its noon sessions are always occasions of interest and pleasure. The Exchange Club meets Tuesday at the Elks' Club. The Kiwanis Club, a thriving and enthusiastic organization, meets Thursday noon at the Hotel Deming. The Lions' Club, a new organization but one of the most vigorous, meets Friday at the Deming. All during the sessions of the Indiana State Medical Association the Elks' Club will be open to the convention visitors, and the club privileges will be at the command of the city's guests.

Terre Haute has forty-five churches, many denominations being represented. Her church and school buildings are one of the things of which she is proud. They reflect her interest in and her support of these aspects of community life, and they usually impress the visitor from abroad.

HOTELS

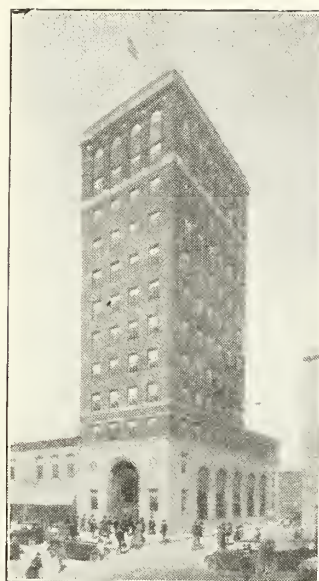
The principal hotels of the city are the Hotel Deming, at the southeast corner of Sixth and Cherry streets. The rates at the Deming are \$2.25 to \$4.00. The Deming is the city's newest and largest hotel, and will be the headquarters of the convention. The Deming has 240 rooms. The Terre Haute House, at the corner of Seventh and Wabash avenue, announces rates from \$1.25



TERRE HAUTE HOUSE
Terre Haute

to \$2.50. This hotel has 150 rooms. For years it was the principal hotel of Terre Haute and has been the scene of many historic occasions. The Filbeck has 100 rooms and announces rates from \$1.00 to \$3.00. The Great Northern, 80 rooms, announces rates from \$1.00 to \$3.00. The

Plaza Hotel, at Ninth and Sycamore streets, and adjacent to the Union Station, has 110 rooms, and the rates range from \$1.25 to \$3.00. Terre Haute is well supplied with eating places, and



CITIZENS' TRUST CO.
Terre Haute

these range from the popular price place to the excellent dining-rooms of the hotels where service is metropolitan and comparable to such places in the larger cities.

HOSPITALS

Medical men naturally will be interested in Terre Haute's hospitals. While she has two that are rated highly and have splendid and imposing buildings, candor compels us to say that her hospital facilities are not entirely in keeping with her other public institutions. For a number of years there has been a shortage of beds in these two hospitals, although they have struggled bravely to meet the ever increasing demands that are being made upon them. The Union Hospital at Seventh and Eighth avenue, fostered and built by public subscription, has grown from a small building to its now metropolitan appearance. St. Anthony's Hospital, at Sixth and Farrington streets, primarily a memorial given by the late Herman Hulman but also supported to some extent by the public, has long given adequate service to the people of the city and a considerable territory adjacent to Terre Haute. Both of these institutions recently have built annexes and these are the last words in such aids to medical science. Both support training schools for nurses.

Terre Haute has a free dispensary, endowed by the late Chauncey Rose. Here medical supplies and medical services are dispensed free to the poor.

HEADQUARTERS

Headquarters for the Terre Haute convention will be at the Hotel Deming at Sixth and Cherry streets, in the heart of the business section of the city. In the Hoosier Nook in the Deming, a spacious room devoted to such public assemblages, will be located the registration booths and the various exhibits incident to the convention sessions. The general sessions will be in the ball room of the Hotel Deming, which makes one of



HOTEL DEMING

Headquarters for the Sessions of the Indiana State Medical Association

the most attractive convention halls in the state. The medical section also will meet in the Hotel Deming ball room. The surgical section will meet in the Central Christian Church at the corner of Seventh and Mulberry streets. The eye, ear, nose and throat section will meet at the Elks' Club, at the southwest corner of Seventh and Mulberry streets. There will be a get-together meeting and smoker for all of the visitors in the ball room of the Hotel Deming at 8:00 o'clock on Wednesday night. The smoker program will be suitable to the occasion and of pertinent interest to the profession. Refreshments will be served. On Wednesday evening a theatre party has been arranged for the ladies. On Thursday night there will be a general meeting held in the new Wyley gymnasium at Seventh and Walnut streets. This building has just been completed at a cost of \$250,000 and is one of the most imposing edifices connected with the Terre Haute schools. At this general meeting Thursday night, Dr. Charles H. Mayo, of Rochester, Minn., will deliver an address, and the meeting will be open to the public. Following the meeting there will be dancing in the ball room of the Hotel Deming.

Terre Haute's accessibility by the National

Highway and also by numerous other and practicable automobile routes suggest that many visitors to the convention will come by motor. The Committee has been mindful of this fact and special arrangements have been made for garage accommodations. Those coming in machines can rest assured that their convenience has been carefully considered by the committee. When registering, tickets will be passed out entitling these visitors to free storage during the convention, and the effects of these tourists will be safely guarded. It might be mentioned that there are numerous attractive drives in and around Terre Haute. Hard-surfaced roads reach to the four corners of the county, to say nothing of the National Highway, which now stretches its broad concrete surface across the states of Indiana and Illinois. So visitors touring by motor will have plenty of opportunity to so relax during the days and evenings of the convention.

GOLF

The old proverb about the disastrous effect of all work and no play has been regarded by the committee in charge of the Terre Haute session and it is believed that the announcement that a golf tournament will relieve the tension of the meetings will be greeted with general acclaim. On Wednesday there will be a tournament held for both ladies and men, for which suitable trophies have been provided. So those addicted to the ancient and honorable game of St. Andrew

TERRE HAUTE TRUST CO.
Terre Haute

can anticipate the visit to Terre Haute with enhanced pleasure. The men's tournament will be held at the Phoenix Club, located three miles east of the city on the National Road. The ladies' tournament will be held at the Fort Harrison Club, located two miles north of the city on the

Wabash river, a picturesque spot, closely associated with the early history of the Northwest Territory.

The Terre Haute Country Club, the largest and most spacious institution of its sort around Terre Haute, also will be open to all visitors during the convention. It is located six miles south of the city in what is called the Allendale section, and is attractive by reason of its natural beauty. The interests of the golfing medics have been placed in the hands of Dr. Frank G. McCarthy, with offices in the Tribune Building, Terre

A trip has been arranged to St. Mary's of the Woods, a renowned educational institution not far from the banks of the Wabash. Its location combines the advantage of the city with the charm and quietness of country life. The journey is made on newly paved roads, first passing through an interesting industrial section of the community and then into Wabash river country scenes to the gates of St. Mary's. This institution was founded about eighty years ago by a group of religious women from France, in what was then the wilderness of the Wabash. Now the beautiful and imposing buildings of the institution stretch far away from the highway. A chapel, said to be



UNION HOSPITAL
Terre Haute

Haute, Indiana, and all those desiring to enter the tournaments are urged to communicate with him for the details of these arrangements.

PLEASANT SEPTEMBER DAYS

Realizing that more and more women are attending the convention every year, special effort has been put forth to make the features of the program filled with social interest. Mrs. Dr. E. B. McAllister has kindly consented to take charge of the program and entertainment of the ladies. Tentative arrangements so far made include a theatre party Wednesday evening, and a boat ride Thursday up the river to the Fort Harrison Club landing. After a luncheon, a bridge party will be given on the lawn of the clubhouse. Dancing will be in evidence at the Deming Hotel following the open meeting Thursday night.

without parallel in this country, rears its graceful white spire from the center of the group of buildings. The grounds are dotted with lakes and are beautifully landscaped and the institution itself is an educational seat of rare and diversified interests.

All visitors can make the convention a success by registering early and frankly making their wants known to the committee, a member of which will be constantly in attendance at the registration booth. The sessions are expected to be not only profitable but enjoyable. Terre Haute hospitality has been acclaimed without stint in the past. The September convention of the Indiana State Medical Association is hoping to fulfill every anticipation prompted by this amiable reputation.

OFFICIAL CALL TO THE HOUSE OF DELEGATES

The next annual session of the Indiana State Medical Association will be held at Terre Haute, Wednesday, Thursday and Friday, September 26, 27 and 28, 1923.

The House of Delegates will be constituted as follows: Marion County, 8 delegates; Allen County, 2 delegates; Lake County, 2 delegates; St. Joseph County, 2 delegates; Vanderburg County, 2 delegates; Vigo County, 2 delegates; the other seventy-eight counties each one delegate; thirteen councilors; the ex-presidents, namely, G. F. Beasley, C. S. Bond, M. F. Porter, W. N. Wishard, J. C. Sexton, G. W. McCaskey, A. W. Brayton, J. B. Berteling, G. T. McCoy, T. C. Kennedy, W. F. Howat, J. B. Salb, G. F. Keiper, J. H. Oliver, J. R. Eastman, W. H. Stemm, C. H. McCully, David Ross and W. R. Davidson; in addition to these, the President and Secretary of the Association, and the Editor of *THE JOURNAL*, all without power to vote except in case of a tie, when the President shall cast the deciding vote.

Blank credentials have been sent by the Secretary to each county society, and the properly executed credentials for the delegates should be mailed immediately to Dr. Charles N. Combs, Terre Haute, or brought to the session. No delegate will be seated unless wearing the official badge.

The House of Delegates will convene promptly at 7 p. m. Wednesday, September 26th, at the Central Christian Church, and again at 8 a. m. Friday at the Central Christian Church.

The order of business will be as follows:

1. Call to order by the President.
2. Roll call and seating of qualified delegates.
3. Reading of the minutes of previous meeting.
4. Report of the Secretary-Treasurer.
5. Reports of standing committees:
 - a. Credentials.
 - b. Administration and Medical Defense.
 - c. Public Policy and Legislation.
 - d. Bureau of Information.
 - e. Medical Education.
 - f. Hospital Standardization.
 - g. Automobile Insurance.
 - h. Scientific Work.
 - i. Necrology.
 - j. Industrial and Civic Relationship.
 - k. Delegates to A. M. A.
 - l. Arrangements.
6. Reading of Communications.
7. Reading of Memorials and Resolutions.
8. Unfinished Business.
9. New Business.
10. Adjournment.

The election of officers will be the first order of business Friday at 8 a. m. In addition to the regular officers, the terms of the following expire

January 1, 1924, and their successors must be elected at this session: Delegates to the American Medical Association to succeed Albert E. Bulson, Jr., Fort Wayne, George F. Keiper, Lafayette; alternates, E. H. Griswold, Peru, Harry Elliott, Brazil, to be elected for the ensuing two years. Delegates must have been members in good standing of this Association and of the American Medical Association for the past two years. Member of the Committee on Administration and Medical Defense to succeed David Ross, Indianapolis, for the ensuing three years. Member of the Committee on Hospital Standardization to succeed J. H. Weinstein, Terre Haute, for the ensuing five years. Delegates from counties comprising the first, fourth, seventh, tenth and thirteenth districts are reminded that the terms of their councilors will expire on December 31, 1923, and new councilors should be elected to succeed the following:

First District, J. H. Willis, Evansville.

Fourth District, C. E. Gillespie, Seymour.

Seventh District, S. E. Earp, Indianapolis.

Tenth District, E. M. Shanklin, Hammond.

Thirteenth District, J. B. Berteling, South Bend.

Some of these elections already have been held, but they should be reported to the House of Delegates at this session for confirmation.

CHARLES N. COMBS, Secretary.

ANNOUNCEMENTS

Following the address of Dr. C. H. Mayo, on Thursday evening, there will be dancing in the ball room of the Hotel Deming for all those who care to indulge.

The Terre Haute Country Club, the largest and most spacious institution of its kind around Terre Haute, will be open to visitors during the convention. It is located six miles south of the city in what is called the Allendale section.

Arrangements for class dinners or luncheons should be made promptly through the chairman of the Committee on Arrangements. Due care should be observed not to have any social functions interfere with the scientific meetings.

All during the session of the Indiana State Medical Association at Terre Haute, the Elks' Club will be open to the convention visitors, and the club privileges will be at the command of the city's guests.

Essayists are reminded that all papers presented before the Association become the property of the Association, and, therefore, are not to be published or submitted for publication elsewhere than in *THE JOURNAL* of the Indiana State Medical Association.

The members and those accompanying them are requested to register upon their arrival. The bureau of information and registration is in the Hoosier Nook of the Hotel Deming. Present your membership cards when registering. Members without their cards may register after their standing has been verified by consulting the records.

The Terre Haute Rotary and Kiwanis Clubs meet each Thursday noon at luncheon at the Hotel Deming. The Exchange Club meets Tuesday at the Elks' Club. The Lions' Club meets on Friday at the Hotel Deming. Members of these clubs in other cities are invited to be the guests of the Terre Haute clubs at the regular meetings.

The election of officers will be the first order of business at the meeting of the House of Delegates held at the Central Christian Church, Friday, September 28, at eight o'clock. No member of the House of Delegates is eligible to office, and delegates to the American Medical Association must have been members in good standing of the A. M. A. for the past two years.

You are requested to wear the official badge, which is supplied when you register, when attending or participating in the meetings. Members of the House of Delegates will have designating badges. Only those who are accredited delegates are entitled to vote at the meetings of the House of Delegates, or even to address the House of Delegates without special permission.

Register early. The booth for registration will be open Wednesday afternoon at one o'clock, and be open throughout the session. Please have your pocket cards with you in order to avoid delay in registration. If you have paid your dues to your county society secretary *only recently*, and have not yet received your membership card, present a receipt from the county secretary and you will be permitted to register. Please get your badge and wear it.

Essayists should bear in mind that their papers as presented at the Terre Haute session represent copy for THE JOURNAL, and accordingly the title and full name and address of the essayist should appear at the top of the manuscript, and the body of the manuscript should be edited carefully. Attention to the paragraphing, punctuation, capitalization, and grammatical construction of sentences will go a long way toward helping the editor and printers. All manuscripts should be typewritten.

Golfers are invited to go to Terre Haute early in order to enjoy the hospitality of the country clubs that have thrown open their links to the visitors. The men's golf tournament will be held at the Phoenix Club, located three miles north of the city on the National Road. The ladies' tournament will be held at the Fort Harrison Club, located two miles north of the city on the Wabash river. The interests of the golfing medical men have been placed in the hands of Dr. Frank G. McCarthy, with offices in the Tribune Building, Terre Haute, and all those desiring to enter the tournaments are urged to communicate with him for details of these arrangements.

The ladies especially are invited to attend the Terre Haute session. Arrangements for their entertainment are in charge of Mrs. E. B. McAllister. The program includes a golf tournament on Wednesday, followed by a theatre party in the evening, and a boat ride up the river to Fort Harrison Club on Thursday, where luncheon and a bridge party will be given. It also is expected that arrangements will be made for a trip to Saint-Mary's-of-the-Woods, the renowned educational institution. Dancing will be in evidence at the Hotel Deming following the general meeting of Thursday evening.

CONDENSED PROGRAM

Wednesday, September 26

AFTERNOON

Meeting of the Council, 5:00 p. m. Dinner at Elks' Club.

EVENING

Meeting of House of Delegates, 7 o'clock, Central Christian Church.

Informal Smoker and get-together meeting, 8 o'clock, Ball Room, Hotel Deming.

Thursday, September 27

FORENOON

General Meeting, 8:30 a. m., Ball Room, Hotel Deming.

No section meetings.

AFTERNOON

Meeting of Section on Surgery, 2 p. m., Central Christian Church.

Meeting of Section on Medicine, 2 p. m., Ball Room, Hotel Deming.

Meeting of Section on Ophthalmology and Otolaryngology, 2 p. m., Elks' Club.

EVENING

Public meeting, 8 p. m., Wyley Gymnasium. Address by Dr. Charles H. Mayo. Subject: "The Function of the Thyroid Gland and the Mortality Following Its Surgical Treatment."

Friday, September 28

FORENOON

Meeting of House of Delegates, 8 a. m., Central Christian Church.

Meeting of Section on Surgery, 9 a. m., Central Christian Church.

Election of Section officers.

Meeting of Section on Medicine, 9 a. m., Ball Room, Hotel Deming. Election of Section officers.

Meeting of Section on Ophthalmology and Otolaryngology, 9 a. m., Elks' Club. Election of Section officers.

Meeting of Council, 12:30. Luncheon at Elks' Club.

AFTERNOON

General Meeting, 2 p. m., Ball Room, Hotel Deming.

COMMERCIAL EXHIBITS

Hoosier Nook, Hotel Deming, Wednesday noon to Friday night.

REGISTRATION

Hoosier Nook, Hotel Deming, Wednesday afternoon, Thursday and Friday.

OFFICIAL PROGRAM OF THE ANNUAL SESSION OF THE INDIANA STATE MEDICAL ASSOCIATION

TO BE HELD AT TERRE HAUTE

WEDNESDAY, THURSDAY AND FRIDAY,
SEPTEMBER 26, 27, 28, 1923

HOUSE OF DELEGATES

First meeting, Central Christian Church, Wednesday evening, September 26, at 7 o'clock.

Second meeting, Central Christian Church, Friday morning, September 28, at 8 o'clock.

COUNCIL

First meeting and afterward dinner at Elks' Club. Wednesday, September 26, at 5 o'clock.

Second meeting and luncheon at Elks' Club, Friday, September 28, at 12:30.

Additional meetings at the call of the President of the Council.

GENERAL MEETINGS

(BALL ROOM, HOTEL DEMING)

Thursday, September 27, 8:30 a. m.

Friday, September 28, 2 p. m.

PUBLIC MEETING

(WYLEY GYMNASIUM)

Thursday, September 27, 8 p. m.

SECTION ON SURGERY

(CENTRAL CHRISTIAN CHURCH)

Thursday, September 27, 2 p. m.

Friday, September 28, 9 a. m.

SECTION ON MEDICINE

(BALL ROOM, HOTEL DEMING)

Thursday, September 27, 2 p. m.

Friday, September 28, 9 a. m.

**SECTION ON OPHTHALMOLOGY AND
OTOLARYNGOLOGY**

(ELKS' CLUB)

Thursday, September 27, 2 p. m.

Friday, September 28, 9 a. m.

COMMERCIAL EXHIBITS

(HOOSIER NOOK, HOTEL DEMING)

Wednesday noon to Friday night.

REGISTRATION

(HOOSIER NOOK, HOTEL DEMING)

Wednesday afternoon.

Thursday and Friday.

ENTERTAINMENT

Wednesday, September 26, 8 p. m., smoker and get-together meeting, Ball Room, Hotel Deming.

Wednesday, September 26, golf tournament for men, Phenix Club. Golf tournament for ladies, Fort Harrison Club; in the evening, theatre party for the ladies.

Thursday, September 27, for the ladies, boat ride up the river to the Fort Harrison Club landing, luncheon and bridge party on the lawn of the clubhouse.

Thursday, September 27, following evening public meeting, dancing, Hotel Deming.

A trip to Saint-Mary's-of-the-Woods has been arranged for the ladies, the exact time of which will be announced later.

SCIENTIFIC PROGRAM**GENERAL MEETING**

(BALL ROOM, HOTEL DEMING)

Thursday, 8:30 A. M.

Organization.

Address of Welcome—Mayor Ora D. Davis.

President's Address—C. H. Good, Huntington.

SYMPOSIUM: DIABETES.

1. J. A. McDONALD, Indianapolis.

Subject: "Insulin in Diabetes".

Abstract.—Insulin not a cure for diabetes, but when used in conjunction with proper dietetic methods is of great value, especially in those cases which could not formerly be brought under control. A definite dietetic plan is desirable both as an aid to education of the patient and for accuracy in readjustments of the proportions of food elements. Importance of estimating basic food requirement and exercise requirement for individual patients. The principle of the high fat diet. Method of estimation of fatty acid glucose ratio. Method of application of insulin. Danger of insulin. Adjustment of insulin to increasing diet. The hypoglycemic reaction and its management. Blood sugar determination as a safeguard in detection of approaching hypoglycemia. Enormous gains in weight through insulin undesirable. Value of insulin in treatment of complications of diabetes, coma, acidosis, gangrene, exhaustion. Case reports—Demonstration of graphic charts.

2. B. M. EDLAVITCH, Fort Wayne.

Subject: "General Clinical Management".

Abstract.—Diabetes should be treated by the general physician. The problem of each diabetic is to determine his carbohydrate tolerance, to arrange a diet to meet his requirements, and to teach him to cooperate properly in the control of his disease. Study of the blood sugar is important in the diagnosis and management of diabetes. Pre-diabetes; its recognition and treatment; illustrative cases. Management of mild diabetes; illustrative cases. Management of severe diabetes; illustrative cases. Conclusions.

3. A. L. WALTERS, Indianapolis.

Subject: "Chemistry of Insulin".

Abstract.—Early experiments leading to the discovery and isolation of the hormone from the islands of Langerhans. Banting's discovery of insulin. Purification of this extract and its standardization and production in a stable form for therapeutic use.

4. MILES F. PORTER, Fort Wayne.

Subject: "Surgical Aspect".

Abstract.—Doctors should avail themselves of every opportunity to use the new ammunition against the anti-vivisectionists which the story of insulin provides. The experiments, animal and clinical, seem to warrant the use of insulin for the purpose of enlarging the field of surgery in diabetics, and in the treatment of acidosis and the vomiting of pregnancy. The protein-saving property of carbohydrate plus the increase in utilization of glucose caused by the administration of insulin encourages the hope that in this remedy (insulin) surgery as well as medicine has a powerful ally.

Discussants: C. P. Emerson, Indianapolis; C. A. Sellars, Hartford City; I. C. Barclay, Evansville; W. D. Gatch, Indianapolis.

Friday, 2 P. M.

5. C. M. MIX, Muncie.

Subject: "The Radical Cure of Cystocele".

Abstract.—Brief history of various operations. Inadequacy of the older methods of operation for this condition. Multiplicity of operative procedures. Modern methods much more successful. The successful operation must be based on an accurate knowledge of the pathology. Present methods based also on anatomical facts. The importance of the anterior portion of the sphincter ani muscle in restoring the pelvic floor formerly was disregarded. Removal of the uterus in prolapsus not a cure of the vaginal hernia. Patients suffering from prolapse usually advised by attending physician to have the uterus removed. This is bad advice in the light of results. Description and technique of the operation. Results and report of cases.

Discussants: H. W. McDonald, Newcastle; G. C. Eckhart, Marion.

6. W. W. CAREY, Fort Wayne.

Subject: "Physiotherapy".

Abstract.—The term physiotherapy has become quite common since the war and to those who have never investigated may mean much or little. Therapy of any type depends upon reaction. Repair, however slight, can take place in a living organism only through some degree of reaction. For the introduction of heat within the tissues we select diathermy. To increase metabolism we use high frequency. The therapeutic effect of galvanism depends upon its mode of application. Actinotherapy, commonly known as ultra-violet, has a wide range both local and general. Massage may be either active, sedative, or stimulative. It promotes metabolism, maintains nutrition, prevents adhesions and hastens repair. Remedial exercise has to do with the re-educating of muscles, correct deformities due to lack of muscular tenacity and increase of muscle tone upon which all muscle vitality

depends. The application of hydrotherapy varies with the therapeutic effect desired.

Discussants: L. C. Sammons, Shelbyville; W. M. McGaughey, Greencastle.

7. D. R. ULMER, Terre Haute.

Subject: "Gonorrheal Infection in the Female".

Abstract.—We find that gonorrhea in the adult infects the urethra primarily, and the endocervix holds second place, while the vagina is rarely infected except in the young. However, both may be infected at the same time. In making the examination, infection should be looked for in the glands of Skene and the Bartholin glands. In gonorrheal urethritis, the symptoms in the female are very much the same as encountered with the male. Bartholin glands are seldom infected except by the gonococcus. Bartholin abscesses should be dissected out rather than incised. The internal os acts as a barrier against all organisms except the gonococcus, the tubercle bacilli and the spermatozoa. The acute disease without chronicity disappears within three to six weeks. The treatment of urethritis is very much the same as in the male.

Discussants: J. R. Young, Terre Haute; E. O. Harrold, Marion.

SECTION ON SURGERY

(CENTRAL CHRISTIAN CHURCH)

Thursday, 2 P. M.

1. W. L. CLARK, Philadelphia, Pa.

Subject: "Treatment of Neoplastic Diseases by Combined Methods". Lantern Illustrations.

Discussants: J. Y. Welborn, Evansville; Charles Stoltz, South Bend.

2. V. P. BLAIR, St. Louis, Mo.

Subject: "Various Kinds of Face Deformities Helped by Operation". Lantern Illustrations.

Discussants: C. C. Terry, South Bend; J. F. Barnhill, Indianapolis.

3. W. H. STEMM, North Vernon.

Subject: "Acute Infective Osteomyelitis".

Abstract.—Different terms are used to designate this disease. A descriptive definition of the infection is given. A brief review of the circulation in the growing bone. The symptoms and the pathology, with emphasis on the importance of early diagnosis and prompt appropriate treatment, to meet the emergency. Sequelæ to the bone not discussed.

Discussants: John H. Oliver, Indianapolis; H. W. Sigmund, Crawfordsville.

4. G. B. JACKSON, Indianapolis.

Subject: "Major Surgical Obstetrics".

Abstract.—Obstetrical practice may be divided into three classes: 1. Normal. 2. Minor surgical. 3. Major surgical. Much of the major surgical obstetrics is a result of preventable conditions, hence the present day trend toward emphasis of pre-natal care. The fault rests upon the general practitioner of medicine, the radical specialists and the public, and is a matter for educational work. General practitioner is remiss in his duty as to prevention and timely recognition of grave abnormal conditions. Citation of illustrative cases. Specialists may be criticized for too great radicalism—especially when taught for general practice. Discussion of DeLee prophylactic forceps, Potter version, and other major surgical forms of delivery in their competitive relations.

Discussants: L. Park Drayer, Fort Wayne; C. A. Ball, Muncie.

5. EARNEST RUPEL, Indianapolis.

Subject: "Experimental Studies of Kidney Regeneration".

Abstract.—Recent clinical and experimental investigations have led to the belief on the part of some that many of the surgical diseases of the kidney could well be met with more conservative surgery than that which is common today. Tuberculosis and injury are among these. The writers show some of the results following experimental infarcts, crushing injuries, hydronephroses, decapsulation, intraperitoneal placement of the kidneys, etc., rabbits and white rats being the animals used. The results tend toward a conservative view and some conclusions of what the criterion for operative interference should be are given.

Discussants: David Ross, Indianapolis; Clarence Bock, Muncie.

Friday, 9 A. M.

6. W. D. LITTLE, Indianapolis.

Subject: "Some Problems of Blood Transfusion".

Abstract.—The chief factors in favor of the paraffined-tube method of blood transfusion are simplicity, positive results, fewer reactions and universal applicability. No other method combines the advantages and has so few disadvantages. The only valid argument against it is the presence of blood stream infection in the recipient and in this condition the method is not contraindicated. The type of tube used and the smoothness of technique are important considerations.

Discussants: Eli S. Jones, Hammond; Elmer Funkhouser, Indianapolis.

7. H. O. MERTZ & H. G. HAMER, Indianapolis.

Subject: "The Importance of Anomalies in the Diagnosis and Treatment of Diseases of the Urinary Organs". Lantern Illustrations.

Abstract.—The embryological development of the urinary organs is reviewed as it explains the cause of urinary anomalies. Illustrative cases of the different types of congenital changes found in the adult are presented, the discussion being limited to the manner in which they complicate diagnosis and treatment of diseases of these organs.

Discussants: F. S. Crockett, Lafayette; G. D. Scott, Sullivan.

8. E. B. MUMFORD, Indianapolis.

Subject: "Parham-Martin Bands in Fractures of Long Bones". Lantern Illustrations.

Abstract.—Type of Instrument—Certain types of fracture require some form of internal fixation. The use of a broad band, giving equal and greater surface bearing is better than the narrow wire with small and unequal surface bearing. Bands rarely have to be removed. Are not a factor in delayed or non-union. Permit fixation without extension and also allow early motion in joints. Lantern slides to demonstrate use in fractures of humerus, radius, ulna, femur and tibia, in compound, in syphilitic, in delayed union or malposition, in comminuted and in fractures in very young.

Discussants: L. A. Ensminger, Indianapolis; G. D. Marshall, Kokomo.

9. KARL RUDELL & A. E. GUEDEL, Indianapolis.

Subject: "Muscular Rigidity Under General Anesthesia".

Abstract.—This paper disregards the general muscular rigidity due to sub-oxygenation or asphyxia. It deals with that local rigidity at the site of operation, due to traumatic reflex activity, with especial consideration of abdominal rigidity during laparotomy. Local infiltration at site of operation which has been practiced for a number of years is often declared a failure due to its improper placement in the tissues. Laparotomies are easily accomplished, with absolute muscle flaccidity, under light ether or nitrous oxide-oxygen anesthesia, if the local anesthesia is properly introduced.

Discussants: O. G. Pfaff, Indianapolis; F. H. Jett, Terre Haute.

10. FLOYD ROMBERGER, Lafayette.

Subject: "Anesthesia from a Review of 2,500 Cases".

Abstract.—2,500 routine anesthetics give a representative cross-section of the surgery of any one community. The anesthetist, as a member of the surgical team, is in the premier position to observe the immediate effects of surgical trauma, as evidenced by differences in technique. Complete co-ordination and intensive advance study of the surgical problem, by each member of the team, a concerted attack, avoidance of delay, gentle surgery and sharp dissection will reduce most surgery to less than one hour; where this cannot be done, better operate in two stages. These are the essentials to complete success.

Discussants: Etta Charles, Anderson; W. N. Thompson, Sullivan.

SECTION ON MEDICINE

(BALL ROOM, HOTEL DEMING)

Thursday, 2 P. M.

1. W. A. FANKEONER, Marion.

Subject: "Epidemic Encephalitis—After Effects".

Abstract.—A systemic infection with localized intensity of pathology in the central nervous system, chiefly the brain stem. No symptom appears different from what may be seen in many other disorders of the nervous system. It is the development and grouping of symptoms that differentiates. Mortality around 20 percent. One-third of survivors may recover after many months, the other two-thirds will be inefficient from annoying conditions or wholly incapacitated from loss of initiative and interest or from the more organic effects of a destructive pathology. The most general after-effect is a retardation of both physical and mental processes. In the range of phenomena anything may appear from a slight tic to a complete paralysis, from mental hebetude to insanity. The paralysis agitans syndrome appears in a very high percentage of cases.

Discussants: C. F. Neu, Indianapolis; E. T. Dipell, Huntington.

2. A. B. GRAHAM, Indianapolis.

Subject: "A Preliminary Report of the Use of Quinine and Urea Hydrochloride in the Treatment of Fissure Ani".

Abstract.—No lesion of equal size is responsible for more acute pain, suffering and discomfort than that of fissure ani or "intolerable ulcer". There are but few if any lesions in which surgical treatment is attended with more certain success. Preliminary report of the use of quinine and urea hydrochloride in the treatment of fissure ani. Description of technique employed. Report of results in 32 cases. Advantages of this new method of treatment. Disadvantages.

Discussant: J. W. Ricketts, Indianapolis.

3. JOHN LOVETT MORSE, Boston, Mass.

Subject: "Physical Examination of Infants and Children".

Abstract.—Great importance of thorough physical examination of infants and children, not only as an aid to diagnosis but also in the determination of their development and general condition. Many physicians fail to appreciate how much can be learned from a careful physical examination and how much greater its relative importance is in infancy and childhood than in later life. Present tendency is to neglect physical examination and to lay undue emphasis on laboratory procedures. Systematic review of physical examination of infants and children. Differences in physical signs at various ages and from adults. Remarks as to diseases and diagnoses suggested by the physical examination of various organs.

4. CLYDE L. CUMMER, Cleveland, Ohio.

Subject: "Secondary Anemia. Important Possibilities to Be Considered in Making a Differential Diagnosis".

Abstract.—Anemia is to be regarded as an important clinical symptom. Certain classes may be separated as clinical entities, the so-called primary anemias, such as chlorosis and pernicious anemia. In the majority of cases, however, anemia is secondary to some definite cause. It becomes a valuable sign in many ambulatory patients if it stimulates careful study to ascertain the nature of the latent etiological factor. It is not the intention to consider the entire category of conditions which may manifest themselves first through an anemia, but to emphasize the following conditions which should be borne in mind making a differential diagnosis, and to discuss some of them briefly. I. Anemias due to infections: (a) Tuberculosis, (b) focal infection, (c) late syphilis. II. Anemias due to infestations: (a) Malaria, (b) intestinal parasites. III. Anemias due to repeated blood loss: a. Non-malignant (1, gastric or duodenal ulcers; 2, hemorrhoids; 3, menorrhoea); b. malignant. IV. Anemias due to intoxications (a) lead, (b) benzol.

Discussants: Miles F. Porter, Jr., Fort Wayne; W. D. Asbury, Terre Haute.

5. L. P. HARSHMAN, Fort Wayne.

Subject: "Diphtheria Control".

Abstract.—Prevention the most important circumstance. The Schick test applied to 1,500 inmates of the school for feeble minded showed a higher percentage of positives than in the public schools. Observations on the administration of toxin-antitoxin mixtures to 900 inmates shows effectiveness in the control of the disease but reveals a severity of reaction more marked than usually described. The use of a new vaccine with a different strength shows less severity.

Discussants: Milo K. Miller, South Bend; Karl C. Eberly, Fort Wayne.

6. Lantern Slide Talk on South American Hospitals—F. W. FOXWORTHY, Indianapolis.

7. Moving Picture Showing Entire Process of Digestion and Passage of Food Through the Alimentary Tract—Picture Service Corporation, New York City.

Friday, 9 A. M.

8. GRACE L. HOMMAN, Laporte.

Subject: "Arthritis of the Spine".

Abstract.—Arthritis of the spine is more common than is usually thought. It is important to discover the etiological factor. The onset is often insidious. Early examination and correct diagnosis are of the utmost importance. All cases of lumbago and sciatica, or more or less persistent and obscure backache, should call for a radiograph of the spine to rule out any diseased condition in that region. Inasmuch as tuberculosis of the spine in adults is usually secondary to tuberculosis of the lungs, it is advisable to have a radiograph of the lungs. In making a diagnosis, it is not always easy, and sometimes impossible, to differentiate a pyogenic from a tuberculous infection. If in doubt, the patient should be treated as though tuberculous. Careful search for foci of infection should be made in all cases of pyogenic or doubtful origin, and their removal instituted before treatment of the spinal condition is started. When treatment is begun early, there is reason to expect a comparatively early and permanent cure. Case reports. Lantern slides.

Discussants: G. W. McCaskey, Fort Wayne; B. R. Kirklin, Muncie.

9. THOS. J. BEASLEY, Indianapolis.

Subject: "Tuberculosis of the Bronchial Lymph Glands".

Abstract.—It is suggested that there can be a tuberculous infection of bronchial lymph glands which, when they ulcerate and discharge into a bronchus, give rise to a typical clinical picture. In some instances all the discharge from an emptying gland may be expectorated and discharged without disseminating the infection to the parenchymatous tissue of the lungs. In other cases the lung tissue does become involved. Consideration is given to the anatomical distribution of bronchial lymph glands and the direction of the lymph flow, which will help to understand the distribution of the infection. Empirically, it is thought that the administration of calcium and cod-liver oil are of value in the treatment.

Discussants: S. E. Earp, Indianapolis; C. R. Bird, Greensburg.

10. A. S. GORDIANO, South Bend.

Subject: "The Frequency of Thymic Hyperplasia in Toxic and Non-Toxic Goiters".

Abstract.—Renewal of discussion of thymic influence in exophthalmic goiter. Review of literature and study of 288 cases of toxic and nontoxic goiter. Statistics of various writers. Out of 100 autopsies upon patients with goiters at the Mayo Clinic, 74 were patients with exophthalmic goiter and the thymus was found hyperplastic in 48%. The remaining 26 were toxic nonexophthalmic goiter (adenomatous goiter) in which the thymus was found hyperplastic in 34%. In this study goiters are classified clinically as follows: exophthalmic goiter; adenomatous goiter with hyperthyroidism; adenomatous goiter without hyperthyroidism. The relative frequency of hyperplastic thymus in association with goiters is shown by tables. The nontoxic goiters are not associated with hyperplastic goiters. The hyperplastic thymus is almost as frequent in adenomatous goiters with hyperthyroidism as in exophthalmic goiters. The influence of age is practically negligible as to frequency or actual weight of the gland. The conclusions are as follows: 1. The thymus is invariably hyperplastic in toxic goiters and not in nontoxic goiters of this series. 2. Age is not an important factor to the frequency of degree of hyperplasia of the thymus gland. 3. Thymic hyperplasia is the result rather than the cause of toxic goiters in the majority of the cases as shown by the curative effects of partial thyroidectomy, especially in toxic adenoma. 4. That the fatal cases of toxic goiters are due to the associated hyperplastic thymus has not been proven. But it may be a very important contributory factor to the cause of death.

Discussants: V. H. Moon, Indianapolis; J. C. Sexton, Rushville.

11. F. S. SAYERS, Terre Haute.

Subject: "Syphilis of the Lung".

Abstract.—Syphilis of the lungs is supposedly a disease rarely encountered, and one which is relatively but little understood. Modern investigators are broadening our understanding of this condition and showing that the incidence is greater than previously has been supposed. There are two types, congenital and acquired, the acquired being of greater interest to clinicians. The symptoms and signs of the acquired type are neither constant nor distinctive, changing in the different stages of the disease, but usually closely simulating those of pulmonary tuberculosis. Terminal broncho-pneumonia in connection with an inadequate heart is reported to be of high incidence in luetics who have come to autopsy.

Discussants: F. M. Gastineau, Indianapolis; J. E. Douglas, Garrett.

12. A. M. COLE, Indianapolis.

Subject: "Use of X-ray and Radium in the Treatment of Superficial Malignancy".

Abstract.—Importance of recognizing and destroying precancerous lesions. *Treatment.* Older ideas of treatment—"arsenic paste" and quackery. Caustics in general. Surgery of superficial cancer. Radiation treatment—advantages of; technique in brief. Importance of an

adequate dose. The x-ray and radium combined at times with electro-coagulation is the most successful treatment. Consideration of lip cancers. Lantern slides showing effects of treatment.

Discussants: H. J. Pierce, Terre Haute; Stanley J. Clark, South Bend.

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

(ELKS' CLUB)

Thursday, 2 P. M.

1. E. M. SHANKLIN, Hammond.

Subject: "Post-Refractive Considerations".

Discussant: H. C. Parker, Gary.

2. EUGENE L. BULSON, Fort Wayne.

Subject: "The Diagnosis and Localization of Foreign Bodies in the Air Passages".

Abstract.—1. History. Especial emphasis of the importance of taking a careful history. A negative history is valueless. (a) Symptoms of tracheal and bronchial foreign bodies. (b) Early symptoms of irritating foreign bodies, such as vegetable substance in the bronchus. 2. Physical examination, including indirect laryngoscopy. (a) Inspection. (b) Percussion. (c) Auscultation. (d) So-called asthmatoïd wheeze. 3. Roentgenography. (a) Roentgenogram should be taken in every case of suspected foreign body. Antero-posterior and lateral views always should be made. (b) The localization in bronchial tree of non-opaque foreign bodies by roentgenogram. 4. Endoscopy.

Discussant: W. F. Molt, Indianapolis.

3. E. MCGINNESS (Guest Paper), Chicago.

Subject: "Conservative Ethmoid Surgery".

Abstract.—Discussion of the anatomy and physiology. Ethmoidal labyrinth landmarks to be preserved. Preservation of the normal cell ostii. Surgical technique.

Discussant: Karl Brown, Muncie.

4. R. E. REPASS, Indianapolis.

Subject: "The Association of Para-Nasal Sinus Infection with Broncho-Pulmonary Disease".

Abstract.—Importance as an etiological factor in respiratory disease cannot be overestimated. Maxillary sinus infections most frequent as etiological factor. Modes of infection by two distinct routes: (1) The lymph vascular system, (2) by direct inhalation of infected discharges. Sub-acute and chronic respiratory disease, where the etiological factor is in doubt, should have a painstaking examination for possible focal infection of the upper air passages. Early diagnosis of focal infections as casual factors in lung disease is a prime requisite to successful treatment and ultimate cure.

Discussant: J. W. Wright, Indianapolis.

Friday, 9 A. M.

5. J. R. GILLUM, Terre Haute.

Subject: "Dacryo-Cysto-Rhinostomy".

Abstract.—The treatment of chronic dacryocystitis with epiphora is reviewed, bringing out the fact that the dacryocystitis has been cured in several ways, but until within the last few years the epiphora has been incurable. A detailed description of the West endonasal dacryocysto-rhinostomy is given, bringing out the importance of a preliminary partial submucous resection of the septum and a middle turbinotomy. Special attention is called to the necessity for the removal of sufficient bone and for the removal of at least the nasal half of the lacrimal sac. Ten sacs are reported operated, the time having elapsed since operation ranging from 8¾ years to one year and one month. The patients have been watched since operation and fluorescein tests have been made at six-month intervals. At the present time all patients are free from epiphora and give positive fluorescein tests. No patient shows any

symptom that would indicate an incomplete cure. Conclusions. It is possible to cure with a dacryocystorhinotomy not only the dacryocystitis but the epiphora; that some means better than the present should be devised which will enable the removal of the bone more easily; that in cases of corneal infection it is safer to do a sac resection.

Discussant, W. C. Dyer, Evansville.

6. B. J. LARKIN, Indianapolis.

Subject, "Retinitis Proliferans".

Abstract.—Retinitis proliferans is especially interesting, since the cause is still doubtful. The condition is characterized by the formation of a connective tissue membrane which springs from the retina, and extends into the vitreous. It occurs most frequently in young adults who are subjected to repeated retinal hemorrhages, yet it is found at all ages. The cause of these hemorrhages may be certain diseases: tuberculosis, syphilis, nephritis, diabetes, low or high blood pressure. The coagulability of the blood and trauma are important factors. The prognosis is always unfavorable.

7. E. J. LENT, South Bend.

Subject: "Retinitis Proliferans". Report of Case with Lantern Slides.

Discussants: A. L. Marshall, Indianapolis; F. S. Cuthbert, Kokomo.

REPORT OF THE SECRETARY

House of Delegates, Indiana State Medical Association:

Gentlemen—I beg to report that so far this calendar year there have been 2,605 paid-up memberships in the Association, an increase of 17 over the corresponding time for last year. This is the largest number of paid-up memberships that has been reported at the annual session since 1917, and testifies to the steadily increasing interest in the Association. Our President, Dr. Good, this year has made a tremendous effort to stimulate interest of the physicians throughout the state, and it is very gratifying to notice that his efforts have been availing.

Respectfully submitted,

CHARLES N. COMBS, Secretary.

REPORT OF THE COMMITTEE ON ADMINISTRATION AND MEDICAL DEFENSE, INCLUDING REPORT OF THE TREASURER

House of Delegates, Indiana State Medical Association:

Gentlemen:—In reporting the eleven cases now pending before the committee, we wish to call attention to the fact that one year ago at this date there were fourteen cases pending, and that two years ago on this date there were seventeen cases pending. During the past year the entire number of cases handled by the committee during the twelve years of its existence have been reviewed and rearranged in their exact chronological order. This has necessitated the changing of the case number in some instances. Referring the cases pending as printed in the report one year ago, we report the following progress:

(Old)		
(No.)		
No. 64	68	Closed—No further expense.
No. 69	67	Closed—No further expense.
No. 86	83	Withdrawn—No expense.
No. 97	92	Pending.
No. 102	96	Verdict for plaintiff—exp. \$1,260.86.
No. 103	100	Dism'd at plaintiff's cost; exp. \$165.00.
No. 106		Pending.
No. 107		Pending.
No. 108	109	Member died. No further expense.
No. 109	108	Pending.
No. 110		Thrown out of court. No expense.
No. 111		Verdict for defendant. Exp. \$218.00.
No. 112		Verdict for defendant. Exp. \$400.00.
No. 114		Withdrawn. Expense \$5.00.

NEW CASES SINCE LAST REPORT

No. 115	Pending.
No. 116	Compromised. Expense \$50.00.
No. 117	Pending. Two trials. Jury disagreed both times. Expense \$250.00.
No. 118	Pending.
No. 119	Pending.
No. 120	Pending.
No. 121	Pending.
No. 122	Pending.

This leaves eleven cases in the hands of the committee. Nos. 97, 106, 107, 109, 115, 117, 118, 119, 120, 121 and 122.

FINANCIAL REPORT

Medical Defense Fund.

Receipts:

Balance on hand last published report,	
January 1, 1923.....	\$ 2,032.91
Medical Defense Apportionment, 2,605	
members at 75 cents each.....	1,953.75
Total	\$ 3,986.66

Disbursements:

Case No. 112.....	\$ 400.00
Case No. 102.....	1,210.86
Case No. 116.....	50.00
Case No. 114.....	5.00
Case No. 117.....	250.00

Total 1,915.86

Balance on hand Sept. 1, 1923.....	\$ 2,070.80
Liberty Bonds	\$5,000.00

Treasurer's Fund.

Receipts:

Balance on hand last printed report,	
January 1, 1923.....	\$ 9,177.13
Membership dues (2,605 members).....	10,420.00
Total	\$19,597.13

Expenditures:

THE JOURNAL, \$2 per member.....	\$5,210.00
Medical Defense Fund, 75c per	
member	1,953.75
Secretary's, stenographer.....	495.00
Postage and incidentals.....	48.40
Printing	206.37
Councilors' expenses.....	140.54
Legislative Committee.....	337.75
Kardex outfit for Secretary.....	553.31

Total 8,945.12

Balance on hand September 1, 1923.....\$10,652.01

Respectfully submitted,

CHARLES N. COMBS, Treasurer,
E. M. SHANKLIN,
GEORGE R. DANIELS,
DAVID ROSS.

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

House of Delegates, Indiana State Medical Association:

Gentlemen:—Your committee on Public Policy and Legislation wish to make the following report:

Pursuant to a recommendation of this committee, the House of Delegates adopted a resolution providing that the President appoint an Educational Committee. A report of this committee will speak for itself.

Before the meeting of the General Assembly in January of this year an aggressive campaign was made for the purpose of amending the Medical Practice Act. We

sought to strengthen the penalizing clause of this act by providing for the injunction against persons who practice medicine "within the meaning of the law" without first procuring a license as provided by statute. This amendment failed of adoption in the House of Representatives by a very close vote. The fight against it was led by Representative Post of Madison County.

The Chiropractic Cult offered a Bill in the House of Representatives known as House Bill No. 215. On motion of Representative Gootschalk, of Adams County, this, Bill was so amended that the friends of the Bill withdrew it from the House.

The Osteopaths succeeded in amending the Medical Practice Act to provide that whereas, at present, they practice under a limited license, under the amendment they may practice surgery and obstetrics, and administer antiseptics, anesthetics and narcotics without the institution from which they graduate being required to maintain a standard as "regards Materia Medica" in conformity to other institutions.

This Bill, which was known as House Bill No. 202, was reported out of committee, without my knowledge, and with the approval of members of this Association who were members of the committee. When the Bill reached the Senate, it was opposed by your committee. However, members of this Association appeared before the Senate Committee, and addressed the Committee in behalf of the Bill. After passing the Senate, your committee opposed it before the Governor, and again was met by members of this Association who appeared before the Governor in behalf of the Bill. The Governor signed it. I then addressed a letter to the State Board of Medical Registration asking that legal opinion as to the constitutionality of this Bill be requested of the Attorney General before granting these new licenses. The attorney for the Board advised that the Bill was unconstitutional, attorney for the osteopaths that it was constitutional, whereas the opinion of the Attorney General was not sufficiently clear so that the Board felt disposed to take action, which according to my information is yet in abeyance.

Your committee would recommend that the House of Delegates adopt a resolution supporting the opinion of the attorney for the Board, and urging the Board to resist this special legislation to the court of last resort.

House Bill No. 186, known as the Podiatry Bill, sought to license chiropodists to diagnose and treat medical and surgical diseases of the human foot. This Bill was vicious for many reasons, principally because it sought to license a specialty, without requiring qualifications in the general subject of medicine.

This Bill likewise was reported favorably out of Committee, which contained members of this Association, without knowledge of your committee. When we appeared in opposition to it before the Senate Committee we were met by members of this Association who addressed the Committee in support of the Bill. It passed the Senate, and when we appeared before the Governor in opposition to it we were again met by members of this Association in support of it. However, we were more successful in our efforts in opposition to this measure, for happily, the Governor could see the great mistake and vetoed it.

Respectfully submitted,

F. W. CREGOR, Chairman.

REPORT OF THE BUREAU OF INFORMATION OF THE INDIANA STATE MEDICAL ASSOCIATION

House of Delegates, Indiana State Medical Association:

Gentlemen:—At the last meeting of the Indiana State Medical Association the House of Delegates formally approved the appointment of an educational secretary and the creation of a Committee on Public Education. At the time the appointment of such a committee was approved by the House of Delegates, and as a result

of the discussion of the question by the House, it was understood that Dr. J. N. Hurty of Indianapolis should be chosen to the position of Educational Secretary and that his appointment should follow his early retirement as State Health Commissioner. Shortly after the appointment of the undersigned as members of this committee, Dr. Hurty became a candidate for membership in the Indiana Legislature and was elected in November. His term of service did not end until about April 1st and his illness following retirement from the Legislature made it impossible for him to assume the duties of the office as Educational Secretary. He had accepted the position tendered by the committee to become effective upon his retirement from the Legislature. The impairment of his health led him in May to definitely decline the position, the active duties of which he had not yet assumed.

The House of Delegates, having understood that Dr. Hurty was to be chosen for this position, and their action having been confirmed by the Council at its mid-winter meeting, and an appropriation of \$5,000 made with this understanding, the committee continued to hope that Dr. Hurty might assume the work, and when he felt later that he should definitely decline, the interval was too short between that date and the session of the Indiana State Medical Association to organize the work under the direction of a new Educational Secretary. Meanwhile the committee has held numerous meetings and has been considering an outline of the work which it regards of the greatest possible importance. The chairman of this committee has been in correspondence with several states, and also with the secretary of the American Medical Association, and has received considerable data covering the work which is being conducted in other states along the lines proposed in Indiana. In Colorado, Oregon, Maine, California, Illinois, Michigan and other states there is an awakening to the fact that an obligation rests upon the medical profession to convey authoritative information to the public as to an infinite number of matters of public interest relating to medicine. In some of the states, particularly in Oregon and Michigan, the work has assumed a very wide scope, possibly broader in its character than it may be wise to undertake in Indiana at present. Its League for the Conservation of Public Health has been formed under the initiative of the Oregon State Medical Association, and its objects are summarized as follows:

"1. To investigate, collect, prepare and disseminate all obtainable data practically touching the conservation, improvement, and protection of the public health, and put the principles of preventive medicine and surgery into general practical effect.

2. To create Committees of Specialists to study, discuss, analyze and report on the causes and effects of the specific diseases and conditions that constitute community health problems, factory and sanitation and industrial hygiene.

3. To publish and circulate health bulletins, leaflets, pamphlets and other appropriate literature, to educate and organize public opinion, make the important facts of hygiene household knowledge, and thereby eradicate popular errors and unsound views.

4. To stimulate scientific research to solve the doubtful public health problems, and make known to the public, by appropriate literature, timely lectures, and through the press, the problems and progress of scientific medicine.

5. To promote a wider and more accurate knowledge and adoption of preventive measures in the home, school, store, factory, farm and mine.

6. To study sympathetically and systematically from the humanitarian and utilitarian standpoint such social problems as are the cause or effect of disease.

7. To investigate the environmental causes of disease and the most efficacious methods of prevention and treatment of communicable diseases, seek to improve living

and working conditions and suggest desirable legislation to promote and protect the public health.

8. To undertake independent and impartial sociological and experimental medical research, and comprehensive investigation into the difference between urban and rural morality, conditions affecting the various sections and localities of Oregon, including the problems of tuberculosis, malaria, cancer and pneumonia, protection of infant life and maternity, milk, food, water supply and general sanitation.

9. To conduct a bureau of research and information which will investigate and furnish health statistics to all members, to cooperating organizations and societies, and to the press.

10. And generally to initiate, encourage, foster, aid and promote such activities as tend to advance, conserve and protect the public health."

The Oregon League also has established a publication known as *The League Bulletin*, which is published monthly. A letter from the Executive Committee states that:

"At present the League is bringing the gospel of better health and better medicine to the people throughout the State, directing insofar as it is possible the trend of popular opinion into paths of right thinking and right living. The organization is a direct result of a long felt need."

"The League is no longer in the experimental stage."

In California and Maine the League for the Conservation of Public Health handles this work independently of the State Medical Society. The editor of the *California State Journal of Medicine* writes to your committee as follows:

"The work through our League is of several types: First, we publish the magazine 'Better Health'. Secondly, we have a syndicated service for newspapers, and we will enclose you a few samples of this daily service. Through this service we are now reaching probably between two and three million readers, and yet no physician's name ever appears in any of the work.

In addition to this, through our various cooperating members in different parts of the state, we handle personal letters by the thousand.

Both the State Society and the League furnish speakers, of course, to all parts of the state for medical meetings. The State Society encourages—I must say not over successfully, however—the holding of meetings by county societies two or three times a year to which the public is invited. Both the League and the State Society (the League in particular) furnish speakers to all sorts of public gatherings that wish to hear about public health.

Perhaps the most important move we have made yet is in becoming identified with the Del Monte Conference, which is the western movement corresponding to the Yama Yama Conference, no doubt familiar to you. We feel that medicine and public health can best be presented to the men worth while from the economic standpoint through economic organizations of practical everyday economists."

A letter received from the Secretary of the American Medical Association says:

"In a number of states the state medical association acts in very close cooperation with a 'league for the conservation of health'. This is not the name that is always applied to such an organization, but is the name of the original body of its kind, established in California."

In Michigan the joint committee on public health education which is composed of representatives of the Michigan State Medical Society, the University of Michigan, the Michigan Board of Health, the Detroit College of Medicine and Surgery, and the Michigan State Dental Society, has issued a very informative, educational program. This program is prefaced by a very sane definition of the function of the committee which is as follows:

"The function of the Joint Committee is to present to the public the fundamental facts of modern scientific medicine for the purpose of building up sound public opinion relative to the questions of public and private health. It is concerned in bringing the truth to the people, not in supporting or attacking any school, sect, or theory of medical practice. It will send out teachers, not advocates."

The joint committee in Michigan was formed on the initiative of the State Medical Society. The work is primarily educational and is based on the supposition that "public health is a public concern".

The program of the Michigan committee lists fully one hundred different speakers on approximately one hundred and fifty different topics of public interest relating to medicine. A few of the titles will suggest the general scope of the work:

"The Achievements of Surgery."

"The Family Doctor in the Home and the Community."

"Germs and Their Relation to Human Life."

"Why Have Smallpox in Michigan?"

"Preventive Dentistry."

"Fundamental Rights of Childhood."

"The Cancer Problem."

"Germs, Good and Bad."

"Everyday Causes of Nutritional Disturbances."

"Our Eyes and How to Care for Them."

"A Glimpse into the Doctor's Workshop."

"What Is Good Water?"

"The Foundations of the Healing Art," etc.

It is the judgment of your committee that this work should be organized on the lines named in the discussion of the question at the last annual session of the Indiana State Medical Association, and that at least for the present it should comprehend a dissemination of authoritative information to the public, the careful estimate of the work, including an executive secretary who should give all his time to this work, the rental and equipment of an office, the employment of a stenographer, the expense of stationery, postage, etc., will more than consume the \$5,000 which the council approved on the recommendation of this committee as a first estimate. At that time the work was not as fully understood as at present. In Oregon, where the work is very fully organized, the Oregon State Medical Society has raised the dues to \$20 per year with the provision that \$10 of this amount should go to the support of the work of the league. The executive secretary of the league also acts as secretary of the Oregon State Medical Association. Your committee makes no official suggestion as to this matter, but earnestly calls attention to the necessity of having an executive secretary whose time shall be wholly devoted to this work and who preferably has had some newspaper or medical journal training, or at least shall be competent to write all articles relating to the work of the committee, compile the vast amount of literature relating to the work in other states and summarize it in a clear and concise way. Your committee believes that it is possible to impress and favorably influence the public mind in the interest of higher medical standards and higher medical legislation, and to create an altruistic sentiment which will do much to foster and promote the unselfish work of the medical profession in the interest of the public.

Your committee recommends that an appropriation of \$7,000 be set aside for this work. The undertaking already has been authorized by the House of Delegates of the Indiana State Medical Association at its last session and the detailed plans presented to the Council at its mid-year meeting have been approved and the work should now actively be put in operation. None of the money appropriated by the Council has been expended thus far.

With the approval of the Council the name of the committee has been changed to that of Bureau of Public Information of the Indiana State Medical Association.

It is understood that the work of the executive secretary will be under the direct control of the bureau and that all literature disseminated must have been reviewed and approved by the members of the bureau.

Respectfully submitted,

BUREAU OF INFORMATION OF THE
INDIANA STATE MEDICAL ASSOCIATION.

WM. N. WISHARD, Chairman,
DAVID ROSS,
F. W. CREGOR, Secretary.

REPORT OF THE COMMITTEE ON MEDICAL
EDUCATION

House of Delegates, Indiana State Medical Association:

Gentlemen:—One of the outstanding features in the field of medical education is the annual session of the Association of American Medical Colleges and of the Council on Medical Education of the A. M. A.

The session of the Association of A. M. C. this year was unusually interesting. The meeting was held in Ann Arbor, with Dean Emerson of the Indiana University School of Medicine, President of the Association, in the chair. The President's address, on the Moral Qualifications of the Medical Student, was very favorably received.

The problem of the two-year medical school was presented by Dean French of the North Dakota School of Medicine. The close association of medical laboratories with the departments of chemistry, physics, and biology was emphasized. This is, of course, a condition obtaining in the freshman year of our own State School of Medicine. "The Financing and Management of the Teaching Hospital," such as the Robert W. Long Hospital of Indiana, was well discussed by Dean Meader of the University of Colorado School of Medicine. The Hospital Medical School, discussed by Dean Ordway of the Albany Medical College, was a closely related topic.

Dean Keller of the University of Texas Medical School presented a paper on "The Place of Anatomy in the Medical Curriculum," which elicited considerable discussion. It was recognized that in the course in anatomy, in addition to teaching the subject matter, the instructor has the difficult task of introducing the student to a vocabulary of some 5,000 anatomical terms, part of which at least are used throughout the medical course. Furthermore, the student comes to the work in anatomy woefully lacking in the ability to observe accurately, and draw reasonably correct conclusions from his observations. The capacity of doing these things is essential to present and future success, and the cornerstone of this capacity is commonly laid in the anatomical laboratory. Still further, the student must acquire the power of visualization by thinking in terms of structure. He must learn to visualize organs of the body in action, and their correlations. He must have not a series of unrelated snapshots, however accurate, but a visualization of the human structure as a whole and especially of the thoracic and abdominal viscera.

Dean Cutter, of the Albany Medical School, read a paper on "Shall a Fifth or Intern Year Be Required for the M.D. Degree and for Admission to the Licensing Examination?" This problem has received consideration repeatedly by the Educational Committee of the Indiana University School of Medicine and by the State Board of Medical Registration and Examination. We have even had a joint consideration of the question and jointly decided that at the present time the difficulty of administration overbalanced the advantages secured, since nearly all graduates voluntarily take an internship.

"Premedical Requirements in Chemistry" was discussed by Dean Hough, of the University of Virginia Department of Medicine. A questionnaire had been submitted and interesting points of view secured. The consensus of opinion was that the present minimum requirement

in organic chemistry, four semester hours, is inadequate as preparation for study of physiological chemistry. An eight-semester hour course was recommended by a majority of those consulted. It is interesting to note that the Indiana University School of Medicine has never accepted students with the minimum requirement, four semester hours. For many years our requirement was five semester hours. A year ago six semester hours was made the minimum requirement, and for ten years we have been offering the eight-semester hour optional course in organic chemistry and many take it.

It was proposed by Dean Hough that the total number of hours be changed from 60 to 72 semester hours for admission to a school of medicine holding membership in the Association of American Medical Colleges. This proposal was discussed at length by a considerable number of speakers and among others by your chairman, from whose discussion I quote: "I do not share the conviction that we increase a man's preparation for the study of medicine by merely requiring of him more work. I reviewed my class this year after the questionnaire of Dr. Hough was received, and I found that 50 percent of the class had had 72 hours or more of premedical work. I cannot tell the least difference between these two halves of the class in the work done in the laboratory. Our increased requirement should be qualitative, not quantitative. Last fall I eliminated seventy-five applicants for matriculation in our School of Medicine who had completed quantitatively all of the premedical work, but who did not come up to the qualitative requirement we demand. We want intelligent medical students, and we do not assure ourselves of increased intelligence merely by asking for more work. We stand a better chance of getting more intelligent medical students if we emphasize the qualitative requirements.

"As to the thought of learning a subject after the course is completed, I may recall in this connection an address made by President Hadley of Yale to a graduating class in medicine some years ago. He said: 'Young men, conferring upon you these diplomas today is not an indication on our part that we believe your education is complete. On the contrary, it is only an indication that we believe you are prepared to learn, and that we have a reasonable degree of assurance that you will learn rightly.'

"It seems to me that is the fundamental matter. When we complete the course in physiological chemistry or in anatomy we want to have a reasonable degree of assurance that our student is prepared to learn rightly. To have this assurance there must be a certain fundamental content to the course. The schools of engineering learned this long ago. Some schools taught the trick of doing certain work, other schools gave fundamental courses. The graduates of the first group had greater facility in their limited field but were lost when a new problem arose which was not in their box of tricks. The students trained in fundamental courses showed ability to meet an emergency. The field of medicine demands fundamental training in fundamental courses."

A discussion of "The Danger of the Stereotyped Curriculum" by Dean Emerson was followed by a consideration of "Present Ideals of Physical Plant in Medical Education" presented by Dean Bardeen of the University of Wisconsin Medical School, with lantern slide illustrations. Remarkable groups of medical buildings are under construction in different parts of the United States. The plans of those built, of those building and of those proposed, presented by Dean Bardeen, should be very helpful to institutions facing this problem.

"The Art of Medicine" was discussed by Dean Cutter of the University of Nebraska College of Medicine. Dean Cutter is the newly elected President of the Association of American Medical Colleges. His discussion emphasized the thought that "Medicine must maintain its superstructure of service on its foundation of science".

Dean Call of the Medical College of Virginia, Richmond, presented a short-paper on the "Responsibility of

the Medical Schools for the Future of the Medical Profession".

"The Teaching of Hygiene in Normal Schools, Colleges, and Universities" was discussed by T. A. Storey, professor of hygiene in the College of the City of New York, formerly associated with the Federal Social Hygiene Board.

Among others your chairman discussed this paper as follows:

"I am a great believer in the importance of the subject that has been discussed by Dr. Storey, and for twelve years I have assisted in giving the course in hygiene required of every student during the first or second year of his course in Indiana University. It seems to me that if anybody in the world is interested in and should take the place of leadership in this matter, it ought to be the medical profession, the profession that has given the people of the civilized world so great an increase in average life rate. (Here Dr. Myers moved that a committee of three be appointed to prepare a resolution approving the teaching of hygiene in normal schools and colleges. Seconded. Carried.)" The committee here authorized reported at the business session as follows: "Resolved, That it is the sense of the Association of American Medical Colleges that all universities and colleges and teachers' training schools provide for a brief but comprehensive course of instruction in personal, domestic and community hygiene and sanitation for all their students, such instruction to be given preferably in the freshman year. The word 'hygiene' as here used includes the necessary instruction in the fundamental principles of human physiology."

On motion duly seconded, this report and the contained resolution were accepted and adopted.

The usual meeting of the Council on Medical Education of the A. M. A. was assembled in Chicago the following Monday, where an excellent program of papers and reports was presented.

Respectfully submitted,

BURTON D. MYERS, Chairman.
MILES F. PORTER,
EDMUND D. CLARK.

REPORT OF COMMITTEE ON AUTOMOBILE INSURANCE

House of Delegates, Indiana State Medical Association:

Gentlemen:—It will be remembered that this committee was first appointed at the 1921 session of this Association. It was believed that the members were paying an excessive price for automobile insurance; that the members constitute a class of careful drivers; and that the moral element, which has to be considered carefully in automobile insurance, was, in case of the members of this Association, far above par. Accordingly your committee was directed to investigate and recommend a plan whereby the members of this Association could obtain reliable automobile insurance at a rate proportionate to the actual risk.

Your committee conducted a lengthy investigation and had expert legal advice, and made a report at the 1922 session of this Association. This report and the legal advice which was a part of it consisted in part of an abstract review of the methods of conducting automobile insurance; stock company, mutual and reciprocal. That report was published in full in the October number of THE JOURNAL and was read at the 1922 session.

The committee had arranged with the Standard Auto Insurance Association to accept the risk of members of this Association at rates vastly below the standard stock company premiums. At that time the committee recognized the prejudice existing against reciprocal insurance concerns. It recognized that the success of a reciprocal organization depended largely upon the personnel of the attorney-in-fact organization. It recognized that the personnel of the attorney-in-fact would without doubt change in the course of time. Therefore, although the

committee was thoroughly satisfied with the stability and integrity of the then attorney-in-fact, relation with the Standard Auto Insurance Association was recommended for one year only.

Under the plan recommended, the insurance was to be written for the members of this Association by mail and through the agencies of the County Secretary. It was believed by the committee that the insurance provided would be satisfactory for the year, and that much money could be saved for the members. It likewise was believed and hoped that the plan put in operation for the year would furnish to your committee and the members of this Association valuable information of an actuarial character on the reputable doctor as an automobile insurance risk. The figures resulting from the business written by the Standard Auto Insurance Association for the members of this Association during the past year have, so far as they have gone, confirmed our belief and allegations that the doctor is a preferred risk. However, the insurance written for members of this Association has not been sufficient to warrant continued relation with the Standard Auto Insurance Association.

Your committee recognizes two facts: First, that there is and will continue to be a prejudice against reciprocal insurance concerns. Your committee does not discuss the merits of that case at this time, but merely recognizes it as a fact, which has prevented more or less insurance being written under the plan under operation in the past year. Second, that the plan provided for the writing of this insurance through the agencies of the county medical society secretary, or direct by mail from the Standard Auto Insurance Association to the members of our Association. The committee knows full well that the great majority of practicing physicians are more or less neglectful of correspondence. Some physicians do not answer letters at all. It is for this reason more than any other that the committee's plan in operation during the past year has not been successful. The members of this Association have neglected their opportunities; indeed a considerable portion of our members remain in more or less complete ignorance of the plan. Others seemed to have been informed vaguely that there was an opportunity to save money on automobile insurance but had never read the report in THE JOURNAL and did not know where it was to be obtained. The chairman of this committee has had a great deal of correspondence during the present year, answering letters of inquiry from members of the Association who could have obtained all necessary information by reading THE JOURNAL. Indeed, the Standard Auto Insurance Association report to this committee that they have many more insurance policies in force from doctors whom they assume are members of this Association than they have put in force during the past year for our members operating under this plan.

Your committee concludes from this experience that in whatever plan is hereafter adopted the matter must be brought personally to the attention of the members of the Association or it will fail of success. Your committee has received and considered an offer from the Lumbermen's Mutual Casualty Company of Chicago, as follows:

AGREEMENT

The Lumbermen's Mutual Casualty Company of Chicago, through their representative, F. A. Barker, Vice-President of James S. Kemper & Co., the managing organization of the Lumbermen's Mutual Casualty Company, have agreed to accept the Association's endorsement for a period of one year on the basis of writing full coverage automobile insurance for the members of the Indiana State Medical Association at rates and premiums which the said Casualty Company have promulgated for like organizations; which the said Casualty Company considers as classes of preferred risks for automobile insurance.

It is further understood that the Company will write

such coverage as is desired by the member, at such rates and premiums as are in accordance with the Company's underwriting rules and practices. It being further understood that fire insurance can be obtained up to the value of the car, and that theft insurance can be provided to cover the car with or without accessories.

Liability can be written at the standard limits of five and ten thousand, or such higher limits as may be desired. Property damage can be written at the standard limits of \$1,000 or such higher limits as may be desired. Collision insurance can be written to give full coverage or with the fifty or one hundred dollar deductible clauses.

It is further understood that the Company will assist the committee in bringing to the membership the advantages which can be obtained by circular and advertising matter and personal solicitation, and by advertising in the *Journal of the Indiana State Medical Association*.

The Company have a traveling representative in the State of Indiana who will do soliciting, handling of claims, and such adjustments as may be necessary. The Company maintains in addition to its traveling state representative, who is available for claim and accident work, a staff of adjusters at its Chicago office. It is the policy to dispatch at the earliest possible moment a representative to investigate personally accidents of serious nature.

It is further understood that the Association through its committee may request at reasonable periods a report from the Company as to the ratio of losses to premiums, which will be furnished and segregated as to the classes of premiums of insurance. It is further understood that at the end of a period of twelve months the Company will on determining an approved loss ratio of the Association policyholders, consider the granting of a special differential rate from the base rate used heretofore.

The Agreement is of course contingent upon the approval of the House of Delegates. Your committee hereby recommends such approval. Your committee by its investigation of the Lumbermen's Mutual Casualty Company reaches the following conclusions: That the Lumbermen's Mutual Casualty Company is a legal reserve mutual organization which protects its liabilities with reserves which we deem to be even more than adequate. It does not operate merely with the legal reserve, but has additional voluntary reserves which appear to us adequate to take care of any possible contingencies. That it has assets of more than \$2,500,000, and has a surplus of more than \$600,000. That it is a mutual company, the policyholders participating in the dividends as high as 25 percent. That it was incorporated in 1912 in the State of Illinois, and that its policyholders have increased from 5,000 in 1919 to more than 32,000 in the past year. That it is a subsidiary organization to the mutual company which has written insurance successfully and extensively among the lumbermen and mill owners. That it does not accept automobile insurance in general but secures its business entirely by writing policies for the members of medical associations and automobile clubs which are preferred risks. That the reputation of the company in its dealings with its policyholders is satisfactory, so far as we have been able to determine. That it is prepared to issue policies in public liability up to any amount. That its initial premiums range from 15 to 25 percent lower than those of stock companies, without considering the mutual dividends. That the company has unusually high policy limits.

The committee has been satisfied that the company can and will give good and prompt service to our policyholders. Your committee looks forward to a time in the near future when this and other forms of insurance necessary to our members may be procured at figures practically if not entirely without profit to anyone. The object which your committee desires to obtain is that of securing reliable and satisfactory insurance for our members at cost. This object can only be obtained through the joint action of the medical associations of several states. As a first essential to that attainment,

unity of purpose and action amongst the members of our own Association is absolutely essential. The committee therefore is urging that in the event that the House of Delegates approves this report and concurs in the action of the committee, the individual members of the Association give the movement their active support by placing their insurance as recommended. Unity of purpose and action is necessary to success.

Respectfully submitted,

J. N. MCCOY, Chairman.
R. D. BLOUNT,
CHARLES S. BRYAN.

REPORT OF COMMITTEE ON NECROLOGY

House of Delegates, Indiana State Medical Association:

Gentlemen:—This committee was appointed by the president, Dr. Charles H. Good, in September, 1922, to continue the excellent work which has been so long and so well done by one of our oldest and most honored members, Dr. G. W. H. Kemper. This committee wishes to extend the most hearty greetings to Dr. Kemper and hopes that his useful life may continue to be bright, cheery and full of good health throughout many more years. It also trusts that this work may be continued with the utmost honor to its splendid founder, Dr. Kemper.

We find that there were ninety-three deaths among the members of our profession from August 15, 1922, to July 27, 1923. The youngest was that of Dr. Howard Samuel Perry, of South Bend, aged 33; the oldest that of Dr. R. F. Blount, of Wabash County, age 93, and Dr. James G. Webster, of Colfax, also aged 93.

The month of February led in numbers of deaths, there being 14, with May a close second with 13. November and July each had 9; September and January 8 each; June had 5 and October, December, March and April 6 each; while August had only 3.

Three met death by accident. Dr. Frank Randolph, of Elkhart, was killed when his auto was struck by a train, Sept. 24, 1922. Dr. Harry G. Fleming, of Anderson, was killed in an auto accident near Indianapolis, April 6, 1923. Dr. Thomas A. Drake was drowned in Hutton Creek, near Prairietown, May 14.

Three died of apoplexy; six of organic heart disease; two of appendicitis; one of tuberculosis. Of the entire number eleven died in Indianapolis, two in the Battle Creek Sanitarium, and the remainder at their various homes over the state.

Of the number two graduated abroad. Dr. Oscar Von Barandy, of South Bend, graduated at the University of Budapest, Hungary, in 1900; Dr. Wm. P. Whery, of Fort Wayne, was a graduate of the Licentiate of the Royal College of Surgeons of Ireland in 1860. Nineteen of the number graduated from the Medical College of Indiana; thirteen from Cincinnati; nine from Louisville; seven from the Ohio Medical; six from Rush; five from University of Michigan and the remaining number from various colleges over the United States.

Of the total number seventy-five were allopaths, eleven eclectics, five homeopaths and two were physio-meds.

Respectfully submitted,

GEORGE G. RICHARDSON, Chairman.

REPORT OF COMMITTEE ON CIVIC AND INDUSTRIAL RELATIONS

House of Delegates, Indiana State Medical Association:

Gentlemen:—There has been no meeting of this committee. All work of the committee has been conducted by correspondence. Early in the year each member was requested to submit such suggestions as might occur, that these suggestions might be forwarded for consideration and comment and for final recommendation after each had had his say. But two members replied to the letter. An entire district was requested to make

such suggestions, with no response. The Association is warned that such apathy is suicidal and such suicide carries with it great loss to the body politic.

It is the judgment of this committee that the chairman and at least the majority of the committee should be from Indianapolis or near to that city so that they may be available on short notice to appear before the Industrial Board or Insurance Companies to wage a fight for fees commensurate with good service. The only matter referred for assistance from this committee was received at an hour when the hearing was about to begin, too late to render any assistance.

The duties of this committee seem to interlock with the duties of the Committee on Public Policy and Legislation. This third paragraph of this report is offered with the thought that it very properly may be referred to the Committee on Public Policy and Legislation. There should be some revision of the Workmen's Compensation Act to the end that persons being injured while in the employment of industrial concerns shall have the privilege of selecting their own surgeon without a penalty consisting of the loss of compensation, providing the surgeon whom they select is one who has a good reputation with the profession and community in which he resides; and either the injured party or the party for whom he worked at the time of injury shall retain the right to have consultation without loss to the injured party.

It is the opinion of this committee that contract service in any form is to be condemned for the served, the employed, and the employer as leading to poor service and resultant prolonged illness, more probable permanent disability, and financial loss, and as tending to paternalism with a loss of dignity and professional standards. The right of corporations to employ individuals to conserve their interests is recognized, but money paid for such service should be regarded in the light of retainer fees, and for actual service rendered full and proper fees should be charged and paid. Violation of this procedure should be made a test of membership in the State Medical Association.

There are many conditions arising which cannot be disregarded—which are menacing the very life of the profession and tending to an immeasurable loss to the civic body through destruction of all incentive to individual effort and high achievement. Not the least of these is the apathy of the profession regarding these dangers. One might almost say we are in a state of coma. Gradually paternalism, State Medicine, is appropriating that which the profession has produced, and is saying to the individual of initiative, no matter how you may strive or what you may accomplish, it becomes the property of the State and you may serve or not as you like for the small reward we care to offer. If medical men are to live, if present medical achievement is to continue, if we are to advance, these encroachments must cease. The profession gives largely and freely, but it cannot give all and continue. If present tendencies continue the State and the profession will learn too late that the goose that laid the golden egg has been sacrificed to paternalism. Public health societies, welfare movements, state medicine, must be scrutinized carefully for the "joker" that will absolutely and certainly destroy all medical and surgical advancement. The cry is not for the profession alone but for the public welfare.

Respectfully submitted,

CHAS. H. MCCULLY, Chairman.

REPORT OF DELEGATES TO AMERICAN MEDICAL ASSOCIATION

House of Delegates, Indiana State Medical Association:

Gentlemen:—At the request of our president, Dr. Chas. H. Good, it is our pleasure to submit the following report of the recent session of the American Medical Association held in San Francisco in June:

There were 3,765 fellows present. Indiana physicians in attendance numbered 46. The civic auditorium housed the entire convention, including meetings, exhibits, etc. It was a distinct advantage to be thus convenient to all the activities of the Association. The immense auditorium proper was given over to the commercial and scientific exhibits. Considering the great distance from the center of population, it was surprising to find all available space utilized. It was a miniature exposition in itself and well worth deliberate and careful scrutiny and study. Here is where one finds exhibited the very latest in physical equipment as well as the latest in research work in medicine.

The meeting of the House of Delegates was the first item on the program. This began two days in advance of the scientific session so that the delegates might have opportunity to attend the sections of the scientific assembly.

The House of Delegates is composed of 150 members, fifteen of whom are representatives from the scientific sections, and three from the Army, Navy, and Public Health Service. The rest are parceled out to the different states in the ratio of membership, but each state has at least one representative. Those who have access to the *Journal of the A. M. A.* (all fellows receive it) may wonder how the House is able to transact the vast volume of business accomplished in three meetings. This is the way: A couple of weeks prior to the session each delegate receives from headquarters in Chicago a handbook containing reports of the Secretary, Board of Trustees, Treasurer, Auditor, Bureau of Legal Medicine and Legislation, Judicial Council, Council on Health and Public Instruction, Council on Medical Education and Hospitals, and Council on Scientific Assembly. A list of the general officers, standing committees, meeting places and hotel headquarters, local committees, officers of sections, and the House of Delegates, with its order of business, is included. An appendix contains the Standing Rules and the Constitution and By-Laws. All told the volume contains 184 pages. Each delegate must read carefully this volume that he may understand the business presented and its reference to the committees of the House, nine in number. The House is presided over by the Speaker, elected by the House. Formerly the President of the American Medical Association performed this function, but a good parliamentarian is needed so that business may be transacted expeditiously. Very few doctors understand parliamentary practice, and certainly the experience of the past demonstrates that this observation applied to our presidents. The House works under high pressure.

Dr. Olin West is Secretary. His report shows that our state associations have 89,243 members, considerably over half the licensed practitioners of the country. By virtue of this membership all are *members* of the American Medical Association, and by their delegates from the counties to the House of Delegates of the State Medical Associations select the delegates to the House of Delegates of the American Medical Association. Fifty-three thousand six hundred and thirty-seven are Fellows of the Association. These pay \$6.00 per year for the expenses of the Association. They receive in return a ten-dollar valuation in the weekly *Journal of the American Medical Association* and such service as the Association can render collectively and individually. Hereafter each fellow will receive gratuitously the monthly Bulletin. Thirty-six thousand members contribute absolutely nothing to keep the American Medical Association in operation and yet are accorded the privileges of sending delegates to its House of Delegates. The Indiana State Medical Association, for example, has 2,436 members in good standing. But of these only 1,365 are fellows of the American Medical Association. Indiana has 4,353 men engaged in practice, of which 3,000 have never qualified for Fellowship in the American Medical

Association. The slogan of our president—"3,000 members in the Indiana State Medical Association by January 1st"—should be broadcasted that not 3,000 doctors but every reputable physician in the state shall be affiliated actively with our State Medical Association and soon thereafter as Fellows of the American Medical Association. Indiana is 37th in the list of states in the number receiving the *Journal of the A. M. A.*, as compared with the total number of doctors in the United States. We ought to make a better showing, for Indiana is not only the center of population of the nation but the center of literary culture as well. Now let it become the center of medical literary culture. It must be stated, however, that over 600 doctors receive the *Journal of the A. M. A.* who are not affiliated with us. To be up to date one must be a Fellow of the American Medical Association and receive its *Journal* and attend the annual sessions as far as possible.

Very interesting is the report of the Board of Trustees. The *Journal of the American Medical Association* cleared \$369,636.19 on a million dollar business; \$600,000 was received for advertising. Were it not for the latter we Fellows could not receive the journal that we do. This is a tribute to the skill and ability of our manager and editor, Dr. George R. Simmons. For several years he has been the target of abuse because of the stand he takes for purity of advertising. Efforts have been made and are being made for his displacement, but why dismiss any man that can make the showing that he does with our *Journal*? That would be utter folly. Dr. Simmons this year completed twenty-five years of service as Editor of the *Journal*. In honor of this silver anniversary, complimentary resolutions praising his work were adopted by the House. The *Journal of the American Medical Association* is easily the leading medical journal of the world.

The assets of the American Medical Association are \$1,263,411.24. It will repay all physicians when in Chicago to visit and inspect the property of the Association at 535 N. Dearborn Street.

For the past year the Association has conducted a Bureau of Legal Medicine and Legislation. Its secretary is Dr. William C. Woodward, also a lawyer. Under its scrutiny has come the relation of the profession to the National Prohibition Act, the unsatisfactory Harrison Narcotic Act, the Veterans Bureau and its relation to the chiropractors, the Shepard-Towner Act, the reorganization of the Federal Health activities, the Federal Income Tax, Defense and Indemnity in malpractice suits, and medical practice acts, quite an array for our new bureau to undertake.

The outstanding work of the Council on Public Health and Public Instruction was the inauguration of the new lay medical journal, "Hygeia". This monthly magazine should find a place upon the table of the waiting room of all our doctors' offices.

The report of the Council on Medical Education and Hospitals is exceedingly important. Group practice has been investigated. All told there are 270 groups or clinics in the country, but not more than a hundred are real clinics. In the 270 groups, 2,430 physicians are associated in one way or another. The all-around family physician still functions practically unanimously. On account of the unwarranted advertising indulged in by a number of the so-called clinics the House of Delegates revised the Principles of Ethics to eliminate this objectionable feature of such group practice.

Clinical laboratories are to be investigated this official year with a "view to secure a responsible and proper supervision of and adequate equipment and facilities for this branch of medical work".

The average age of graduation for the classes in medicine of 1922 was 26.8 years. For low grade medical schools it was 34.4 years. The lowest average for any one school was 24.5 years and this school is in class A. The proportion of physicians in the United States is one to 724 of the population.

There are 6,578 hospitals in the country, but only 654 have been approved for intern training. Provision is made for 3,671 interns.

According to this report Indiana has 93 less doctors than in 1922.

One of your delegates was chairman of the reference committee on Sections and Section Work. To another was entrusted the direction of the fight against amendments to the constitution introduced at the St. Louis session last year, to eliminate and emasculate the delegates from the scientific sections as well as the delegates from the Army, Navy, and Public Health Service. After a campaign lasting over a year the status of these delegates was held intact. In fact these delegates were placed on a parity with the state delegates as to length of service. A rather notable victory was won, as it also seemed to quiet opposition to the present policies of the Association.

A number of the states of our Union require as prerequisite to the practice of medicine one year of residence in an approved hospital as an intern, after graduation. One of your delegates after a year of fruitless search for a curriculum for such training, introduced a resolution into the House of Delegates calling upon the Council of Medical Education and Hospitals to frame such a curriculum. The House of Delegates referred it to the said Council to report at next annual session.

The House of Delegates voted that the Red Cross should not enter into the field of public health or community work. Due recognition was accorded the organization for its magnificent war work.

To rehearse all the work of the House of Delegates is impracticable. Fellows, read your *Journal of the A. M. A.* of June 30th, July 7th, and July 14th. Those who are not Fellows, borrow these journals of your conferees and then ask yourselves the question, "Am I not cheating myself of much information, education as it were, and ought I not become a Fellow of the Association?" May the wish become the father of the thought and action to that end. But be sure to return the journals to their owners.

The Scientific Assembly. For this the American Medical Association primarily exists. To further the progress of medical science is our grand ambition. So each year the annual session of the Association is held really by the fifteen sections to discuss the problems presented to those sections by the essayists appearing. This year more than 250 selected papers were presented to the fifteen sections for discussion. They will appear in *The Journal*. In his address to the House of Delegates President Ray Lyman Wilbur spoke as follows: "The most striking thing about this organization is the scientific sections. If you will study the organizations of these sections, and look over the types of papers that are read, you can see great prospects in the development of American medicine. The real strength of the organization lies in its sections and they are the vital forces to the organization." These meetings are the real post-graduate schools for the profession. He who will take the time and trouble and go to the expense to attend these meetings will never need to attend the so-called post-graduate medical school, really a "brushing-up school", to keep up to date.

The officers of the A. M. A. are:

Dr. William Allen Pusey, Chicago, President-Elect.

Dr. William E. Musgrave, San Francisco, Vice-President.

Dr. Olin West, Chicago, Secretary.

Dr. A. A. Hayden, Chicago, Treasurer.

Dr. Ray Lyman Wilbur, Palo Alto, California, President.

President Wilbur, who is also president of Leland Stanford University, is a forward looker and believes in

the Association formulating policies which will take five to ten years to accomplish.

Next meeting place, Chicago, June, 1924. Let's all go.

Fraternally submitted,

GEORGE F. KEIPER,
ALBERT E. BULSON, JR.,
HARRY ELLIOT,
Delegates.

REPORT OF COMMITTEE ON ARRANGEMENTS

House of Delegates, Indiana State Medical Association:

Gentlemen:—Your committee has selected the Hotel Deming as headquarters, where will be found the registration booth and all of the exhibits. As many of the activities of the convention will be centered at headquarters as possible. However, it has been found necessary to locate the Surgical and the Eye, Ear, Nose and Throat Sections in buildings that are only a short distance from the Hotel. The Surgical Section will be located at the Central Christian Church and the Eye, Ear, Nose and Throat Section at the Elks' Club, both on opposite corners at Seventh and Mulberry Streets. Dr. Mayo's address, on Thursday night at 8:00 o'clock, will be at the Wiley Gymnasium at Seventh and Walnut Streets, two blocks south of Wabash Avenue, and will be open to the public. Following the open meeting there will be dancing at the Hotel Deming ball room, with an excellent orchestra, willing to play as long as anyone cares to dance. This will be an informal affair and evening clothes are not expected. The "Smoker" Wednesday evening will be in the ball room of the Hotel Deming and the chairman of the Committee on Entertainment has promised that the entertainment will be "something different" and worth while.

It is hoped that members will repair to the registration booth, Hotel Deming, as soon as they arrive, where, upon registration by membership card, will be given them such tickets as will entitle them and their friends to such courtesies as the Vigo County Medical Society and the

Terre Haute Academy of Medicine are able to extend. These will include badges, theatre tickets, transportation tickets, stickers for automobiles giving immunity from parking restrictions, and free automobile storage in garages while attending the session. Letters and telegrams should be sent to the Hotel Deming in care of Dr. C. N. Combs, Secretary of the Association. Four golf courses are open to members, and those desiring to enter the golf tournaments should write at once to Dr. F. G. McCarthy, Chairman of the Golf Committee, Tribune Bldg., Terre Haute, Ind. The Elks and K. of C. both freely extend the privilege of their clubs to visiting doctors and their families and friends. Special care has been taken to provide entertainment for the ladies in the way of theatre parties, luncheons, drives, dancing, golf and bridge, and yet the affairs have been so arranged that each can follow her own particular choice of entertainment without being tired or rushed. Those having in charge the arrangements for class reunions, medical fraternities, dinners, etc., should communicate with the chairman of the Committee on Arrangements in order that there may be no conflict or interference with other activities of the Association.

Every member of the Vigo County Medical Society is a member of the Reception Committee and will be distinguished by a special badge, and they should be called on at any time during the meeting for information or help. Their time and automobiles are placed freely at the disposal of visitors, and they will be chagrined if they are not given an opportunity to render service.

While the hotel accommodations in Terre Haute during normal times are entirely adequate, at a convention the size of the one held by our Association, there is always some congestion. It is therefore urged that those attending make reservations through Dr. A. F. Knoefel, Chairman of Hotel Committee, Tribune Bldg., Terre Haute, Ind., so that they may be taken care of satisfactorily.

Respectfully submitted,

M. R. COMBS, Chairman.

LATE RESULTS IN THE TREATMENT OF SYPHILIS

H. H. Hazen, Washington, D. C. (*Journal A. M. A.*, June 23, 1923), says there are no satisfactory criteria as to the cure of syphilis. Relapses may occur after a patient has been asymptomatic and had a negative Wassermann reaction for six or seven years. Not all cases of early chancre are cured by modern methods of treatment. The early and intensive administration of arsphenamin may prevent a patient from developing a natural immunity, and a relapse may occur shortly after treatment is discontinued. Cerebrospinal syphilis can develop by the time the chancre is manifest. Every patient should have a spinal puncture preferably just before the second course of arsphenamin. A provocative Wassermann may be misleading, and may be dangerous in that a relapse may follow it. A luetin reaction under proper precautions may be of value as a criterion of cure. The results of treatment in early secondary syphilis are surprisingly good. A few cases of late syphilis can be cured, but in the vast majority of instances, late syphilis cannot be cured. Intraspinal therapy will often yield results when intravenous therapy fails.

VALUE OF CARBON TETRACHLORID AS AN ANTHELMINTIC

Several hundred men who had been exposed to hookworm infection previous to imprisonment and who had been in custody for from three months to three years were chosen by J. F. Docherty, Ceylon (*Journal A. M. A.*, Aug. 11, 1923), to try out various anthelmintics, thymol, chenopodium, betanaphthol and carbon tetrachlorid. Carbon tetrachlorid proved to be the most efficient anthelmintic in 3 c.c. doses. The anthelmintic value of carbon tetrachlorid is practically unaltered by differences in the number of worms harbored. The apparent futility of prolonged treatment was well demonstrated, likewise that a 3 c.c. dose of carbon tetrachlorid does not produce any lesion of the kidney.

Experiments conducted under controlled conditions show conclusively that hexamethylenamin is not a diuretic.—RUH AND HANZLIK. *Journal of the American Medical Association*, December 9, 1922.

THE JOURNAL OF THE

INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

Office of Publication, 406 W. Berry St., Ft. Wayne, Ind.

SEPTEMBER 15, 1923

EDITORIALS

OUR PRESIDENT

Dr. Charles Hamlin Good, of Huntington, Indiana, president of the Indiana State Medical Association for 1923, is the son of Dr. Jonas Good, and was born at Warren, Indiana, on November 9, 1860. He attended the public schools and was a teacher for two terms. In 1880 he graduated from the Northern Indiana Normal School, at Valparaiso, having chosen and completed the scientific course in that institution. He grew up in a medical atmosphere and studied medicine with his father and with his brother-in-law, Dr. John S. Sprowl, of Warren. He received his medical degree from Rush Medical College in 1883 and commenced practicing at his home town of Warren, where he entered into a partnership with Dr. Sprowl. In 1909 he removed to Huntington, where he has remained in active practice ever since. He was married to Edith Strain, of Milford, Illinois, in 1886 and to them have been born three daughters.

During his entire life Dr. Good has been very active not only in medicine and politics but in everything that has been for the best interests of his community. In 1908 he was a Republican candidate for congress in the Eleventh congressional district and during the campaign he proved himself a man of aggressive and forceful but honorable character and made a host of friends who have been his loyal admirers ever since. He has been honored by his medical confreres by serving as president of his county and district medical societies, as delegate to the State Association, which latter organization has sent him as a delegate to the American Medical Association. During the war he was chairman of the Red Cross, a member of the medical advisory board, the volunteer medical corps and in the county Council of Defense. In fact, Dr. Good not only has been identified with the various organizations for the advancement of medicine, civic affairs and everything pertaining to the loyalty and support of his country but at all times he has been found active in the support of such enterprises. The Association has honored itself in honoring Dr. Good, and under his leadership

and the plea for larger and better medical societies in the State of Indiana, we record the progress that largely may be attributed to the effectiveness of his work and influence.

PERNICIOUS ANEMIA

The last number of the *Practical Medicine Series*, for 1923, has an interesting discussion of the subject of pernicious anemia and calls attention to the fact that the histology of the blood, studied by numerous workers, indicates that there is an actual increased destruction of red blood corpuscles in this disease.

Some authorities seem to think that the bile pigment elimination seen in pernicious anemia can not be due solely to increased blood destruction and suggest that altered liver function is also a factor in causing increased output of bile pigment. It may be premature to assert that there is no increase in the quantity of blood destroyed in pernicious anemia, and in recent years it has become the fashion, with much justification, more and more to regard factors other than the blood in making the diagnosis of pernicious anemia.

Attention especially is directed to the nervous system and the gastro intestinal tract. Thus Minot recently has discussed the importance of achylia gastrica in relation to the digestive disturbances seen in pernicious anemia, and Levine and Ladd in a series of 150 cases studied, again point out the constancy of gastric anacidity in this disease. Hurst is so impressed with these findings that he regards as a causative factor of this disease a pre-existing gastric anacidity which permits parasites to enter the intestines. One of the principal arguments in favor of the intestinal origin of the cause of pernicious anemia has been the constant finding of hemosiderin deposits within the liver parenchyma. The finding of hemosiderin in the liver cells has been taken as evidence that the reported pathologic blood destruction seen in this disease is confined to the liver.

In recent literature syphilis seems to be mentioned in connection with pernicious anemia only for the purpose of showing that it is not an etiologic agent, though it is pointed out that it is difficult to make a diagnosis of pernicious anemia in cases of syphilis with severe anemia and symptoms referable to the nervous system.

The treatment of pernicious anemia is still so unsatisfactory that one can not formulate in a given case even an approximate idea of the duration of life. In addition to general hygienic measures and the administration of hydrochloric acid, irradiation, various physiotherapeutic measures, arsphenamin therapy, and blood transfusion continue to be employed with indifferent success. The indefinite duration of life and the strong tendency to spontaneous remissions enhance the difficulty of evaluating the efficacy of any therapeutic procedures.

It can not be said that enthusiasm for splenectomy in the treatment of pernicious anemia has increased during the last five years. The most extensive recent series of cases is that reported from the Mayo Clinic in which out of fifty cases there was an operative mortality of six percent. Ten patients survived three years and five survived four and one-half years after operation. In this report the opinion is given that a remission usually follows splenectomy and that the measure probably prolongs life in twenty percent of cases. It is pointed out that in all probability most patients most benefited by splenectomy are those in whom the disease simulates the picture seen in hemolytic icterus.

In spite of the widespread use of transfusion of blood in pernicious anemia, very little is known of the mechanism by which the beneficial effects of this procedure are brought about. The impression is prevalent that blood transfusion stimulates the marrow and thus leads to a remission. Whatever the mechanism by which the effects of transfusion are accomplished, most observers will agree that though it does not cure the disease nor prolong life, it more often is followed by a remission than is any other therapeutic measure, barring only the rarely to be advised operation of splenectomy.

THE REWARD OF GENIUS.

The Canadian government has awarded Dr. F. G. Banting a life annuity of \$7,500 as the discoverer of insulin. In commenting on the award, the *New York Times* points out that professional ethics prevent Dr. Banting from exploiting the commercial possibilities of the remedy and that fame will not pay grocers' bills. "The amount suggested as his honorarium seems large only because such appropriations of public funds are so rare. After all, it is only the interest on \$150,000, and compared with the fortunes made by other inventors—the Fords, the Edisons, the McCormicks and their like—it seems absurdly small." The *Times* urges that the action taken by Canada be an example to the rest of the world. "National governments have a duty in this matter, and one which they rarely have recognized. For the most part they have left the maintenance of scientific research to the generosity of individuals or of the few private corporations which have arrived at a realization of what 'pure science' can do for them. * * * A government, if conducted with sufficient intelligence, would change all this. It would establish facilities for determining just what men had rendered or were likely to render services so widely beneficial that everybody should be expected to pay for them. Then it should make due provision for acquiring a discovery or invention of general benefit and offering it freely to anybody in the country, or in the world, who wants to use it." In a recent address before the British Science Guild, Sir Ron-

ald Ross, noted for his discoveries in relation to the control of malaria, also drew attention to the neglect accorded scientists in his country and the United States:

One of the worst cases was that of W. M. W. Haffkine, who in 1896 discovered the inoculation treatment to cure cholera and plague in India. Not being a medical man, Mr. Haffkine could have patented his discovery and made a fortune. But he set to work to manufacture millions of tubes of this vaccine, and thereby saved millions of lives. An accident occurred, and although he was not responsible, he was made the scapegoat by the authorities in India. He was hounded out of the country, and came home, so to speak, fettered with the chains of Columbus about his feet. He was treated vilely—and he was one of the greatest benefactors of the last century. * * * Walter Reed, the American who discovered that yellow fever was carried by the mosquito, was given some menial employment, feeling pulses, administering castor oil, and looking at dirty tongues for a couple of years. And he was allowed to die apprehensive as to how his wife and family could sustain life.

Sir Ronald advised that there should be some state compensation for the research worker who contributes his work for the benefit of all mankind. It is encouraging to find this development of a sound public opinion in favor of properly rewarding scientists. Discoveries such as that of insulin are not made every day or even every decade. The watchdogs of the public treasury need fear no great drain on the public purse from such awards; and, even if there were a drain, the saving in lives and in the cost of disease would more than compensate for the sums expended.—*Jour. A. M. A.*, Aug. 4, 1923.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

THE Time—Wednesday, Thursday and Friday, September 26, 27, and 28.

The Place—Terre Haute.

The Event—The annual session of the Indiana State Medical Association.

THEY say time and tide waits for no man but they forgot to include the Ford automobile in the hands of the average "flivver" owner who has little regard for either the rights or convenience of others.

THE A. E. Little Shoe Company, of Lynn, Massachusetts, manufacturers of Sorosis shoes, are sending neat leather prescription pads to physicians who write for the same and mention this Journal when doing so.

Do you know that THE JOURNAL attempts to protect you by excluding from its advertising pages every kind of advertisement which is in any sense questionable? Therefore, if THE JOURNAL does protect you, why not patronize the advertisers in THE JOURNAL who are worthy of your confidence?

THE evening meeting at the Terre Haute Session, open to the public, will be addressed by Dr. Charles H. Mayo, his subject being "The Function of the Thyroid Gland and the Morality Following Its Surgical Treatment." Probably the address will be of far more interest to the medical profession than to the public.

TERRE HAUTE is seventy-two miles almost straight West from Indianapolis. It is on the National Highway which crosses the State. However, hard surface roads spread out from Terre Haute in every direction, so the automobilists who go by auto to the next session of the State Association ought to have no complaint concerning roads.

A CORRESPONDENT says, "What do you think about doctors joining the Ku Klux Klan?" Our answer is, they are in mighty poor business when they join an organization that adopts a mask to cover up identity, and in disguise practice outlawry. Any principle worthy of support requires no mask for its supporters. It is cowardly to assume a disguise.

THE smoker for the next session of the State Association is in charge of the Terre Haute medical profession and promises to be a unique affair, though the local committee will not give out any information concerning the form of entertainment to be provided. Anyway, members are urged to be on hand Wednesday to attend this smoker and renew old acquaintances as well as make new ones.

THOSE who register at the Terre Haute Session will be given tickets entitling them to free automobile storage during the time of the convention. This certainly is an innovation that will be appreciated by doctors who go to Terre Haute via automobile. One is usually thankful to be assured of storage facilities for an automobile without being told that the services will be gratuitous!

THE medical department of Columbia University announces the discovery of a new remedy for diabetes in the form of an artificial fat. The sub-

stance is known as "Intarvin." It does not cause any sense of nausea and it seems to satisfy the hungry craving for fat that diabetics have. At present the cost of intarvin is about eight dollars a pound, but it is thought that the price will be reduced materially with increased production. A pound lasts a patient from one to three weeks.

A CHAIRMAN of one of the committees of the Indiana State Medical Association in turning in his report has the following to say: "I have had no assistance from the other members of the committee. If they do not manifest more interest than I have been able to stir up they probably will have nothing to say concerning the report I am making. Sometimes, like you, I become much discouraged and even disgusted in trying to fight the battles for a profession seemingly asleep."

IT is reported that a number of young women attending one of the well known Eastern colleges for women have unanimously agreed that they will not consider proposals for marriage from any young men who are not earning at least thirty-five hundred dollars per year. On that basis not many young doctors or professional men of any kind will consider seriously the question of making love to any of those young women. A lay publication in commenting upon the matter says that it is too bad that so many of these young women have elected to remain single, for there certainly will not be enough plumbers or bricklayers to go around!

AGAIN permit us to say that readers are requested to send in items of news, also marked copies of newspapers containing information of interest to members of the medical profession. We shall be pleased to have the name of the sender in each instance. Anonymous contributions, whether for publication, information or criticism, are consigned to the waste-basket. Concerning advertising we desire to say that we exclude from our columns all known questionable ads, and appreciate notification from our readers relative to any misrepresentation. The right is reserved to reject or modify all advertising copy in conformity with our rules.

INDIANA has been noted for its good roads. The state highway commission has been doing excellent work during the past year, and with the exception of a detour now and then where roads are undergoing repair, and these detours usually are not bad, the tourist will find all Indiana roads above the average. Therefore, in spite of good railroad connections to Terre Haute, many doctors will find it convenient as well as pleasant to go by automobile to attend this year's annual session of the Indiana State Medical Association. If you don't know the road to Terre

Haute, ask a representative of the Hoosier Automobile Association, or consult any good road map.

SOME men credit themselves with fame, and a good story is told on one of our Indiana specialists who innocently was asked by an acquaintance to recommend the very best physician in the United States to care for a trouble that the Indiana specialist considered as belonging to the category of ills that he was expert in treating. It is said that his answer was, "My dear madam, every person who seeks the best specialist in the treatment of troubles like yours invariably comes to me and consequently I am unable to advise you where else to go." It reminds us of the oft-repeated story of the Quaker who upon returning from meeting informed his faithful wife that "We had a good meeting. I spoke."

UNDER the title "Jail Can't Cure Them, Doctors Can," *Collier's* discusses the question of emotional instability and gland derangement with which criminals are affected and which can be treated as surely and definitely as malaria or dyspepsia. Our increasing knowledge of the endocrines and of their influence upon every function of the nervous system promises to revolutionize our whole understanding of human behavior. *Collier's* concludes by saying: "One of these days our legislators are going to build larger hospitals and smaller prisons," to which we add that one of these days the medical profession is going to discover that legislatures have legislated the private practice of medicine out of existence, and all human ills will be treated by hospitals and physicians under municipal, state, or federal control.

WE feel a little hesitancy about mentioning it, for we do not desire to be guilty of throwing bouquets at ourselves, but we wish to acknowledge our appreciation of the numerous republications of some of our editorials and editorial notes in other medical journals, the bulletins issued by the American Medical Association and various medical societies. Now comes a medical journal (*Cincinnati Journal of Medicine*) with the statement that one of our editorials is so good that they think it is worthy of being reprinted the *second* time, and we take our hats off in grateful appreciation of the compliment. If we are doing anything to help the medical profession in any way whatsoever, we are aiding in fulfilling our mission. It is our aim to uphold the ethics and the highest ideals of the profession and to support all rational progress. We may not always be right, but we are conscientious in our efforts in *trying* to be right.

THE Oregon State Medical Association has dues of twenty dollars per member and we understand has made other assessments for various

activities. We had some difficulty in raising the Indiana State Medical Association dues to five dollars, and quite recently there was a little agitation to reduce the dues because there happened to be a little surplus in the treasury. If our dues for just reasons were increased to twenty dollars per member we fear there would be a decided increase in the death rate among physicians. Some day doctors are going to realize that activities for their own betterment can not be carried on without money, and when that time comes they probably will be willing to be at least half as liberal as the chiropractors of Indiana who, it is reported, cheerfully contribute twenty-five dollars per member to their Association and find no fault if numerous other assessments are charged up against them.

ALONG with the umbrella mender and the scissors grinder we now have the tonsil and adenoid operator who solicits business by a house-to-house canvass. We have just learned that in one of the Indiana cities where there is considerable rivalry among doctors in securing patients, one doctor, said to be doing a thriving business, makes a practice of calling upon homes where there are children, ostensibly on a public health inspection tour but in reality with a view to advising tonsil and adenoid operations and soliciting the work for himself. Such conduct ought to bring the blush of shame to the advertising quacks who are not recognized by the medical profession as a whole even though they conduct themselves in a more ethical manner than some of the members of our regular medical societies. It is all right to talk about conscienceless quacks, but that title will apply to some of the men in our regular medical societies.

GOLF is a great game. It no longer is the old man's game, for the youths and even the "kids" of the country are more enthusiastic about it than anyone else, and the ladies are taking to it like a duck to water. It offers outdoor exercise, recreation and amusement. It requires skill, perseverance, and moderation in temper. It may be an expensive game if you do not carry your own bag, lose a good many balls, and identify yourself with some club where the initiation fee and expenses are large. However, it can be played at a minimum expense, for it is not necessarily a rich man's game. A large percentage of doctors are taking up golf, and it is an ideal game for them. The golf tournaments which precede most meetings of national and state medical organizations are now regular features. At this year's session of the Indiana State Medical Association the Terre Haute medical profession has arranged for a golf tournament on Wednesday, September 26, which will be open for both men and women, with suitable trophies provided. So take your golf clubs with you.

THE mother of a young school girl suffering from squint due to a large uncorrected error of refraction was told by an Indiana doctor that the child's "cross eyes" were due to a badly performed tonsil and adenoid operation at the hands of a Chicago specialist whom we know to be very capable. The intelligence of the mother leads to the belief that she really had received the advice mentioned. It also develops that the doctor giving the advice was not permitted to do the tonsil and adenoid operation and consequently he may have been a little peeved and got revenge by poisoning the mother's mind with incorrect information. In reality the child did not have a badly performed tonsil and adenoid operation, and in the next place there could be no connection between that and "cross eyes" anyway. Allowing for various misinterpretations of perfectly correct information, there is altogether too much ignorant as well as spiteful advice given by some doctors and we often wonder why the public places any confidence in the medical profession when doctors who ought to know better give such untrustworthy service.

IN the August number of THE JOURNAL we gave quite an extended notice concerning the Tri-State District Medical Association comprising the entire states of Iowa, Illinois, Wisconsin and Minnesota, which will hold its annual session at Des Moines, Iowa, for five days beginning October 29. It is announced that this association is a purely postgraduate organization, the entire time of the annual assembly being taken up with scientific study. A very large list of eminent members of the profession will take part in the Des Moines program. This list already has been published. The symposium will be supervised by Drs. Dean Lewis, University of Chicago; Charles P. Emerson, University of Indiana; Walter L. Bierring, University of Iowa; Hugh Cabot, University of Michigan; William J. Mayo, University of Minnesota; Frederick A. Besley, Northwestern University; George W. Crile, Western Reserve University; and John L. Yates, University of Wisconsin. The physicians of Indiana who are in good standing in the Indiana State Medical Association are cordially invited to attend and take part in the program.

As an evidence to what extent ignorance or personal grievance, or a combination of the two, will go, we hand the cake to the editor of an independent Pacific Coast medical journal who has been guilty of an unjustifiable and malicious criticism of the standing and conduct of the Medical Protective Company having its home office in Fort Wayne, Indiana. We suspect that a fancied grievance is at the bottom of the attacks, and no doubt encouragement is offered by rival insurance companies, but no matter what prompts the attacks, we offer the unsolicited opinion that

the Medical Protective Company is worthy of any confidence or trust placed with them. We have no interest in the Company except that which any right thinking citizen would have for a home concern that is deserving of the highest commendation. We personally know the officers who are men of integrity, ability and financial standing. We have watched the growth of the company's business for thirty years, and we never have heard of a default in a contract, or any criticism from a policy holder. The Company has secured the confidence of the medical profession of the country and it is deserving of it.

AT the San Francisco session of the A. M. A. the House of Delegates through a suitable memorial very properly took occasion to recognize and approve the long and faithful service of Dr. George H. Simmons as editor of the *Journal of the American Medical Association*. Without the slightest question of doubt, Dr. Simmons is one of the greatest medical editors that ever lived. He not only possesses wonderful managerial ability, but has exercised that type of constructive management which spells success. Very naturally he has met with some opposition and fault finding on the part of those who may have disagreed with him, though for the most part it has come from those who had personal grievances or "axes to grind." It was ever thus. The man who amounts to anything and really does things is bound to have enemies. It is only the easy-going, commonplace fellow who never has enemies. It may be possible that *The Journal of the American Medical Association* could have been made what it is today had some one else been at the head, but the fact of the matter is that Dr. George H. Simmons is in a very large measure responsible for it, and it is fitting that the Association should not only recognize his work but continue to give him loyalty and support.

A SERIES of articles entitled "What the Public Health Service Does for Us" is being sent to the lay press. If these articles were reproduced in the lay press they would accomplish a great deal of good. In fact, we often have wondered why the many government circulars and letters containing health news do not receive greater attention at the hands of newspapers to the end that the public would better understand health problems and what the government is attempting to do in protecting the people. As is pointed out by the government bulletins, "dissemination of health information is enormously important," and it is our notion that pressure should be brought to bear upon all lay publications in an effort to have each and every one of them conduct a department of health information just as they conduct a department devoted to market reports or current news. There is no question but that much of the

work done by the federal government is duplicated by the various states, but out of the tons of mail matter sent out, we doubt if a tenth part of it ever reaches those for whom it is intended. Perhaps it is the abundance of the material which gives the average editor of a lay publication a feeling of disrespect for it, and he therefore consigns the whole thing to the wastebasket rather than attempt to give any of it consideration.

EDUCATION of the public will do more to stimulate appreciation of the regular medical profession than anything else. The trouble of it is most of the people, even those who are considered reasonably intelligent, exhibit childlike simplicity when it comes to considering health and how to care for it. The public has been saturated with propaganda by the patent medicine manufacturers and the pseudo-medico cults, and we as a regular medical profession have done little to offset such illogical, inconsistent and even dangerous teaching. It is true that we have various health pamphlets which we offer to the people, if they will come after them, but we seldom put the pamphlet in the hands of those who need them. One of the greatest features in the education of the public will be *Hygeia*, published by the American Medical Association. It is essentially a health journal that offers trustworthy information to the public concerning individual and community health. Every doctor should be interested in placing *Hygeia* in the hands of all people who can read. Keep a copy of it on the reception room table and urge patients to read *Hygeia* just as religiously as they read the home town paper, the *Ladies' Home Journal* or the family Bible. Above everything else, get this journal in the hands of ministers and teachers, many of whom innocently are proselyting for the cults. They toot for chiropractors and other pretenders because they lack real knowledge which *Hygeia* can give them.

WITH the average doctor earning no more at the present time than the average doctor earned ten years ago when the cost of living was less, it is surprising that we have any recruits in the medical profession. Except for the love of the work there is not much inducement to study medicine, for we seldom award medical men either honor or pecuniary compensation that is worthy of their services. With plumbers, bricklayers, stone masons and other representatives of labor earning a minimum of twelve dollars per day, and twice that amount in some localities, it is more profitable to take up a trade. Even the vast army of clerks and office employees filling what are called "starched shirt positions" are beginning to realize that the trades offer opportunities for far greater compensation, and employment agencies are endeavoring to induce such employees to leave their office positions and take employment in the

trades. The law of supply and demand has a good deal to do with the fixing of salaries and wages, and there are altogether too many people who want positions where they can maintain white hands and dress up in clothes of the latest fashion. In a sense this may not be true so far as the medical profession is concerned, but there certainly is no scarcity of medical men in the populous communities, and their compensation is not in keeping with the value of services rendered nor can the compensation be compared to that received from many members of trades unions. There should be a readjustment of conditions, and a greater equalization of compensation for laborers of all kinds whether engaged in professions or otherwise.

THE Indiana State Medical Association committee on automobile insurance has an interesting report to make at the Terre Haute session. There is no question but that automobile insurance costs too much. In fact, it is almost prohibitive for the average automobile owner. Doctors generally are careful drivers and should belong to the class of preferred risks. A large number of companies have been organized to write automobile insurance at rates far less than charged by the so-called standard companies but on investigation it will be found that most of these cheap rate companies are found wanting when their services are most needed. Many of them have no reserves or tangible financial backing. They are all right as long as nothing occurs beyond the collection of the premium, but the minute a policy holder has an accident the story is quite different and through technicality or lack of financial responsibility the loss which should be paid by the insurance company has to be met by the policy holder. If the Association is to recommend any automobile insurance that is cheaper than that furnished by the standard companies it must be insurance that is trustworthy from every standpoint. The doctor who has an automobile policy must be protected and know that when he needs the services of the insurance company he will not be put off through technicality or lack of financial responsibility on the part of the company. Therefore, the Association, as an association, should recommend only such companies as meet the requirements.

AN osteopath in Idaho has been convicted of practicing surgery without a license and the verdict was sustained after an appeal to the supreme court. The decision states that the holder of a license to practice osteopathy in Idaho is not licensed to practice medicine and surgery. In the final decision the supreme court offers some very pertinent reasons for the verdict, and it is pointed out that osteopathy, as defined by the osteopaths themselves, is a system of treating the diseases of the human body without drugs and by means of

manipulations. The word "manipulations" certainly does not cover the practice of surgery in any form nor does it include the use of drugs of whatsoever nature. The court further suggests that if graduates of colleges of osteopathy possess the requisite knowledge and skill to enable them to prescribe medicine intelligently and perform surgical operations, those facts ought to be brought to the attention of the legislature with a view of obtaining legislative action granting to osteopathic physicians upon proper examination the right to practice medicine and surgery as well as osteopathy. Thus the Court seems to have reached the kernel of the whole proposition and emphasized what should be known by legislators and the public that in order to be licensed to practice medicine in all its forms, including the administration of drugs and the practice of surgery, education and training is of first importance. When the osteopaths, the chiropractors, or the members of any other pseudo-medical cult can show that they have had education and are trained in the administration of drugs and the performance of surgical operations then and then only should they be permitted to practice medicine and surgery in the full acceptance of the term.

A Chicago doctor writing from Berlin says that he is able to offer a new discovery for rejuvenation which he hopes to apply in individual cases that are referred by his medical friends. No doubt this is a preliminary announcement to the medical profession, for effect, and later the newspapers will be full of glaring advertisements of a new cure for senility, or "Old Men Made Young." This rejuvenation stunt seems to be overworked, but it no doubt pays for there is "a sucker born every minute" and the world is full of Ponce de Leons who are hunting the fountain of youth. Even in Indiana a notorious doctor, guilty of not only medical fakery of various kinds but having served a term in the penitentiary for performing a criminal abortion, advertises the "Bloom of Youth Sanitarium." Had he stuck to the profitable plan of attempting to restore youthful vigor to decrepit old men and women he probably would have become rich instead of lying, as he does at the present time, under the shadow of the penitentiary after having for the second time been indicted on a charge of criminal abortion. His principal business has been to destroy the bloom of youth instead of restore it.

The latest stunt in this rejuvenation fakery is the use of violet rays in connection with a stimulating and invigorating lotion of secret formula that is advertised to work wonders in thirty days. It is reported that the doctor who is working this scheme already has worn out one violet ray machine and now is considering the advisability of putting in a dozen machines to care for the throngs of foolish old men and women who besiege him to restore their long lost youth.

Medical fakery never will be stamped out entirely, but a crimp would be put in it if lay publications refused all medical advertisements.

ONE of our medical friends recently has returned from an outing trip by automobile and he is so enthusiastic concerning it that we pass along a brief description of the equipment. A Ford touring car was the conveyance. The outing party consisted of the doctor, his wife and a pet rat terrier dog. The tent, collapsible canvas boat, folding camp chairs and table, sleeping bags, blankets, clothing, cooking utensils, fishing tackle and guns were packed in duffle bags of appropriate sizes and carried in the tonneau of the car. One water proof box with special compartments contained sufficient food for a week. A folding gasoline stove, and several electric lanterns and flash lights added to the convenience, and a small radio set afforded entertainment during the evening. The trip included a visit to the mountainous regions of Pennsylvania and New York, with frequent change of location. It required only fifteen minutes to unpack, set up the tent, and get settled for the night, and the same length of time to repack and get started in the morning if only a night was spent in a single place. Whenever the scenery or fishing proved attractive, a stay of one or more days was found enjoyable. Milk, cream, butter and eggs were obtained at farm houses and a small zinc lined refrigerator on the running board of the car served to keep things cool for several hours when ice could be obtained. The doctor, who is an ardent sportsman, reported that he never had experienced such a delightful and comfortable vacation trip in his life, and the best part of it was that he was able to seek out remote spots where the fishing proved best and change his location as often as he liked. He suggests that every doctor who enjoys an outing should try such a trip as he took. Not only is it rejuvenating but it is inexpensive.

SUMMONING a physician by radio is the latest stunt. The steamship *West Cahous*, lying at anchor in Baltimore harbor, about nine miles from the city, needed medical help at about 3 a. m. recently and needed it quickly, says the U. S. Public Health Service. A member of the crew had fallen into the hold and hurt himself seriously. So the captain of the ship sent a wireless broadcast asking help.

The call was picked up, not in Baltimore, nine miles away, but at Cape May, N. J., about 100 miles due east of Baltimore. As Cape May was separated from the *West Cahous* by parts of New Jersey and Delaware and by the eastern shore of Maryland, not to mention Delaware and Chesapeake bays, no direct help from it was possible. But the operator was on the job. Promptly he consulted the long distance list in the Baltimore telephone directory and called up the residence

of the Public Health Service surgeon in charge of the Marine Hospital in Baltimore—100 miles to the west. The Surgeon, roused from sleep to receive the message, asked him to radio certain emergency treatment to the West Cahous and to direct the captain to send a boat to a certain pier in Baltimore, where he would find a surgeon waiting to go out to the ship with him. And so, in the middle of the night, in less than an hour, a wireless-controlled sea-going ambulance carrying a Public Health Service officer reached the side of the injured sailor and brought him later to the hospital.

In connection with this it may be stated that crews of sea-going vessels are entitled to medical service by radio while at sea and to treatment in U. S. Public Health Service hospitals on reaching port, and orders have gone forth to the effect that any marine hospital will prescribe emergency treatment through radio shore stations.

It is quite true that Indiana ought to have a larger representation in the American Medical Association. In fact, there is every reason why every member of our State Association should be a Fellow of the American Medical Association. To receive *The Journal of the A. M. A.*, the largest and best medical periodical in the world, is in itself sufficient compensation to justify identification with the great national organization, to say nothing of other benefits to be derived. However, we are not so much in sympathy with the plea made by organizers that every licensed regular practitioner of medicine should be taken into our county medical societies, for it probably is a fact proven by the experience of every medical society in the populous counties that taking undesirables into our medical societies to reform them does not pay. It is quality not quantity that counts, and there are some men in the medical profession who never were and never will be decent no matter what influence is brought to bear. Usually these men do not require urging in order to secure their application for membership in reputable medical societies. They like to be rated as associating with reputable men, and oftentimes membership in the medical society is used as a cloak for covering up all kinds of crookedness. Until we begin censoring the members of our county medical societies and weeding out the undesirables, we are not going to maintain our high ideals and command a great amount of respect from the public.

What is true of our county medical societies is true of the American College of Surgeons, which was founded upon worthy ambitions and high ideals but which comes very far from living up to the ideals of the organization because it does not select its Fellows with sufficient care, and so far as we know, seldom censures its members for conduct that is unbecoming a Fellow of the Amer-

ican College of Surgeons and should bar him from affiliation with that organization.

It is past history, but we all remember how we were not only urged but in many instances practically forced to buy Liberty Bonds far beyond our means. In fact, when the Liberty Loan was made, the banks were told by government representatives to loan money on Liberty Bonds to those subscribers who could not pay for the bonds in cash. Ultimately these bonds depreciated in value, and many persons not only were forced to dispose of their bonds at a loss in order to meet living expenses but in some instances banks refused to renew loans even when Liberty Bonds were held as security. To cap the climax the government soon began to call in bonds and stop the payment of interest on the dates when the bonds were called. This has worked no hardship upon banks and business men who keep close watch of the stock markets and financial affairs in general but it has been a very serious matter for many poor people and others not familiar with rules governing bond payment, and, in consequence, they have lost in the aggregate hundreds of thousands of dollars through the cancellation of interest coupons. One instance may be cited. The widow of a doctor having a few thousand dollars received from her deceased husband's life insurance was induced to put it all into Victory Liberty Bonds due in 1923. Being unfamiliar with bond transactions, and believing that the security of the government was perfectly safe she paid no attention to the callable feature of the bonds, only to discover in the middle of 1923 that she had lost the interest on her investment since last year when the government called in the bonds and stopped interest on the same. It doesn't seem quite fair, for it works a hardship upon those who can least afford it. It is a good deal like the treatment accorded the soldiers. Nothing was too good for them when their services were needed, but after the war was over the boy who gave up everything for his country at about thirty dollars per month, and perhaps came back ruined in health for life, can whistle so far as receiving any consideration from the government or anyone else is concerned. All of which leads us to wonder just how eagerly people will buy government bonds in the future in case we have another war and how eagerly young men will volunteer to serve in the army when the history of the last war and its injustices is staring them in the face.

THERE is considerable diversified activity on the part of medical societies in an endeavor to promote better health. We now have societies and organizations of many kinds for promoting public health, and in addition a great deal of work in that direction is done by federal, state and municipal boards of health. There is not a question of doubt but that much of the work is

duplicated, to say nothing of misspent energy in the manner of doing the work.

Our own idea is that federal, state and municipal agencies are the ones to undertake the purely educational work, for they have the funds and the machinery with which to put into effect a campaign that really will result in much good if carried out in the proper way. The greatest drawback at present is the fact that so much of the work of boards of public health is devoted to administrative measures, sometimes good and sometimes bad, depending upon politics, and the really necessary work of teaching people how to be well is neglected.

It will be noted in this issue of *THE JOURNAL* that the Committee on Administration has recommended a rather pretentious program related to this very subject to be carried out by the Association. This matter should be analyzed carefully and due regard given to the question of duplicating work that already is being done, or undertaking work that should be performed by federal, state or municipal agencies. At the present time there is room for improvement on the part of all of these various agencies having anything to do with public health conditions. There is too much duplication of effort, too much duplication of inefficiency, too much self exploitation, and too much politics in the sum total of public health work. If we can concentrate our energies we can increase our efficiency. If we must have numerous organizations then let us divide our work and hold each organization to strict account of its activity in that particular field. For instance, the Indiana State Board of Health should accomplish more in its educational campaign than it does at the present time, and do less work that belongs to the private practitioner of medicine. The Indiana State Medical Association should not be expected to do work, educational or otherwise, that is plainly the duty of the State Board of Health.

This whole question of public welfare work is deserving of serious attention, but always with the idea of efficiency and avoiding a division of effort by various agencies.

THE report of the chairman of the committee on Public Policy and Legislation, published in this number of *THE JOURNAL*, discloses some information that distinctly shows why we sometimes fail to accomplish results in legislative matters that interest us. For instance, before the last legislature was a bill providing for the licensing of osteopaths to not only practice surgery and obstetrics but to administer antiseptics, anesthetics, and narcotics without the institution from which they graduated being required to maintain a standard by way of teaching materia medica and therapeutics as in regular medical institutions, and the bill had the approval of some of the members of our Association who were members of the legislative committee having the consideration of the bill in charge. The inconsistency of permit-

ting any one not educated and trained in the use of antiseptics, anesthetics and narcotics to be given the legal right to prescribe or use such means in conjunction with treatment requires no argument, and we are surprised to think that a member of our own Association would approve such a course. The bill passed the legislature, in a measure as a result of the approval of members of our Association who were members of the governor it again received the endorsement of some members of our Association when the chairman of our committee on Public Policy and Legislation very justly attempted to secure the governor's veto.

Another bill which our committee on Public Policy and Legislation opposed was that providing for licensing of chiropodists who attempted to secure legal recognition and the right to treat medical and surgical diseases of the human foot. The bill as presented was so broad in its provisions that any diseases or deformities of the human foot could be treated legally in any way whatsoever by the chiropodists. The bill was reported favorably out of a committee which contained members of our Association, and members of the Association appeared in defense of the bill. However, the governor was made acquainted with the dangerous provisions of the bill and he vetoed it.

The point of the matter is this: What is the use of having and maintaining at considerable expense a committee on Public Policy and Legislation if the work of that committee is to be opposed openly by members of our Association? It occurs to us that every member of our Association, for very patent reasons, should have been opposed to the two bills mentioned, but in case of disagreement, why wasn't it possible to settle the differences and put up a united front in opposition to the bills. We never can accomplish much if we continue to disagree on questions of fundamental importance.

COLORADO MEDICINE publishes a very interesting article entitled, "Editing the Journal." In this article attention is called to the amount of work, initiative and system required in producing the ordinary medical journal. This is followed through from the selection of material, known as copy, which is to be edited, often times rewritten, the preparation of editorial matter which the editor must either extract from his own brain or extract from the brains of obliging confreres, the procuring of news items gathered from all quarters of the state and in a variety of ways, the correction of galley proof, arranging of material into form proofs, making up the index, and last but not least, getting the journal addressed and into the mails so that every one entitled to the current number will receive it. This does not include the procuring of advertising, elimination of advertising that is objectionable in the advertising copy, and arranging it in the proper forms. All of the

vexations rising through kicks from contributors and advertisers to the inexcusable and asinine actions on the part of printers, stereotypers and binders are part of the almost endless task of editing and managing a journal. Kicks from subscribers who have changed their address and to whom it has not even occurred to notify the editor, and the amount of free advice as to how a medical journal should be run, are all a part of the regular grind of an editor.

We can subscribe to all that has been said and add that any state medical journal can be made better if the editor has the assistance and cooperation of the profession. Contributors can make it easier if they will take the trouble to have their articles not only typewritten but carefully edited as to grammatical construction, paragraphing, punctuation and attention to clarity and conciseness of expression. Secretaries of county medical societies can help *THE JOURNAL* as well as their organizations if they will furnish condensed reports of the meetings of their respective organizations, together with abstracts of the more important papers. News notices, especially those relating to deaths, marriages, removals, and other occurrences of especial interest to the physicians of the state, must be obtained through officers of medical societies, individuals, or from the more uncertain news-clipping bureaus. If these items could be sent in by those who are most familiar with them, it would add to the completeness of *THE JOURNAL*. Finally, the editor needs helpful assistance from those who can render it, and at all times he welcomes constructive criticism and suggestions to aid him in betterment of his work. It only irritates him to have carping or malicious criticism and fault-finding by any one and particularly by anonymous correspondents. It is presumed that the editor of each medical journal tries to produce a periodical which is a credit to him as well as to the association which he represents, and he will do his best when he knows that he has the encouragement and cooperation of the entire medical association, for that stimulates him to his best efforts.

DEATHS

ORLANDO B. SURFACE, M.D., of Indianapolis, died at his home August 11 at the age of seventy-seven years.

VESTA SWARTS, M.D., of Auburn, died August 2 at the age of eighty-two years. Dr. Swarts graduated from the Fort Wayne College of Medicine in 1882.

GIDEON P. KIDD, M.D., died at his home in Roann, as the result of apoplexy. Dr. Kidd was seventy-six years of age. He graduated from the Northwestern University Medical School, Chicago, in 1874.

ARTHUR J. McDONALD, M.D., of Bedford, died July 31, at the age of sixty-three years. Dr. McDonald was a graduate of the Louisville Medical College in 1882.

F. J. DRAKE, M.D., of Knightstown, died August 6, aged seventy-five years. Dr. Drake graduated from the Medical College of Indiana, Indianapolis, in 1881.

EDWIN E. ODER, M.D., of Hammond, died July 18 at the age of sixty-two years. Dr. Oder graduated from the Cincinnati College of Medicine and Surgery in 1877.

JOHN H. BOGART, M.D., of Indianapolis, died August 4 at the age of seventy-eight years. Dr. Bogart was a graduate of the University of Michigan Medical School, Ann Arbor.

DANIEL H. PRUNK, M.D., of Indianapolis, aged ninety-four years, died August 2. Dr. Prunk graduated from the Eclectic Medical College, Cincinnati, in 1856 and from the College of Physicians and Surgeons, Indianapolis, in 1876.

JOSEPH W. STUDLEY, M.D., of Marion, died July 21. He was seventy-two years of age. Dr. Studley graduated from the Medical College of Indiana, Indianapolis, in 1881. He was a member of the Grant County Medical Society, the Indiana State Medical Association and was a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION*. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. T. VICTOR KEENE, Indianapolis, has been made a member of the Indiana State Board of Health.

MISS EMILIE C. CHRIST has been made superintendent of the new Adams County Memorial Hospital.

THE Whitley County Medical Corps held a banquet and theater party at Columbia City, August 10.

DR. E. B. VINCENT, of Sunman, has retired from the practice of medicine after having practiced for fifty years.

DR. OLIVER W. GREER and Miss Esther Jackson, both of Indianapolis, were married August 3 at the Hotel Severin, Indianapolis.

THE Putnam County Hospital was opened July 29 for inspection. Miss Era Milburn has been made superintendent of the hospital.

THE Sullivan County Medical Society held a meeting at Paxton, August 8. The dinner-meeting was held at the home of Dr. C. R. Walters.

DR. SHERWOOD, of Mitchell, has been made president of the Association of the Monon Railway Surgeons at the recent meeting held at Michigan City.

FIVE nurses graduated from the training school for nurses of Dr. W. B. Fletcher's Sanitarium, of Indianapolis, at the exercises held in the gymnasium of the school, August 18.

DR. and MRS. A. M. HETHERINGTON, of Indianapolis, are taking an extended boat trip along the St. Lawrence and will visit Niagara Falls, Toronto, Montreal and Quebec.

THE first convention of the American Child Health Association will be held in Detroit, October 15 to 17. The program will be designed to cover child health from prenatal life to maturity.

THE medical societies of Jackson, Bartholomew and Jennings counties held a meeting at Columbus, September 11. Dr. Edwin G. Kyte, of Eli Lilly & Company, presented a paper on "Glandular Therapy".

AT a meeting held in Indianapolis August 2, Dr. Hugh A. Cowing, of Muncie, was elected president of the Indiana State Board of Health. Dr. A. D. McMahan, of Lafayette, was made vice-president.

THE Mississippi Valley Medical Association will hold its 48th annual session at Hot Springs, Arkansas, October 9th, 10th and 11th. There will be a symposium on Cardio-Vascular Renal Diseases and Diseases of the Upper Abdomen. For detailed information write Dr. Charles Travis Drennen, Hot Springs, Arkansas.

DR. LOUIS A. BOLLING has discontinued his government position in Washington, D. C., where he was in charge of physiotherapy activities, and has established himself for similar work in the office of Dr. G. P. Levering, in Lafayette. Dr. Levering left September 4th for a tour of the world extending over a twelve month period.

THE Third District Medical Society held a meeting at Bedford, August 22. Following a luncheon, Dr. Albert E. Bulson, Jr., of Fort Wayne, presented a paper on "Socializing Medicine," and Dr. S. M. Baxter, of New Albany, presented a paper on "Sinus Infection".

AT a meeting of the Medical Veterans of the World War, San Francisco, June 28, Dr. J. Carey Vaux, of Pittsburgh, Pa., was elected president; Dr. B. F. Adler, San Francisco, vice-president; Dr. A. T. McCormack, Louisville, Ky., secretary; and Dr. P. E. Blackerby, Louisville, Ky., assistant secretary and treasurer. The membership of the organization, it is said, numbers 11,000.

INDIANA had 21,302 deaths in the first six months in 1923 as compared with 18,972 in the same period in 1922. The director of vital statistics of the State Department of Health has announced, as a result, that the state death rate increased from 12.9 per 1,000 of the population last year to 14.5 this year. Births in the state for the six months' period this year totaled 30,453, as compared with 29,568 last year, an increase of 885.

THE following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Lederle Antitoxin Laboratories:

Thromboplastin-Lederle.

National Aniline & Chemical Co.:

Enteric Coated Tablets Neutral Acriflavine—"National".

Ointment Neutral Acriflavine—"National" 1 percent.

E. R. Squibb & Sons:

Solution of Hypophysis-Squibb—

Arsphenamine-Squibb, 1 Gm.

Arsphenamine-Squibb, 1.2 Gm.

Winthrop Chemical Co.:

Luminal Tablets ½ Gr. (Winthrop Chemical Co.).

SOCIETY PROCEEDINGS

"LET'S GO—3000 MEMBERS FOR 1923"

To realize this, our President's slogan for this year, it will be necessary for every county society to increase its membership over that of 1922.

The following list comprises the counties who have already done this, and it is hoped that in the succeeding numbers of THE JOURNAL, this list will grow until it includes every county society. If the secretary of any of the smaller county societies will demonstrate to Dr. Combs that his county society cannot show further accessions because of the fact that every eligible doctor is already a member, the name of this secretary will be placed at the head of the list.

County	Secretary
1. Adams	B. F. Beavers
2. Dubois	W. D. Bretz
3. Elkhart	S. T. Miller
4. Knox	C. E. Stone
5. Noble	S. E. Munk
6. Whitley	F. G. Grisier
7. Allen	D. D. Johnston
8. Boone	W. H. Spieth
9. Daviess-Martin	H. C. Wadsworth
10. Gibson	A. H. Rhodes
11. Rush	J. M. Lee
12. Shelby	F. E. Bass
13. Warrick	W. P. Ford
14. Floyd	P. H. Schoen
15. Fulton	A. E. Stinson
16. Huntington	M. G. Erehart
17. Monroe	F. H. Austin
18. Porter	C. H. Dewitt
19. Clinton	L. L. Harding
20. Howard	Florence Olmsted

21. Kosciusko	O. H. Richer
22. Lake	E. E. Evans
23. Marion	Wm. A. Doeppers
24. Posey	John Ranes
25. St. Joseph	R. B. Dugdale
26. Wayne	R. L. Hiatt

GRANT COUNTY MEDICAL SOCIETY

The July meeting of the Grant County Medical Society was held on the 24th at Hillcrest, the summer home of the secretary. Dinner was served by Mrs. Priest and the best testimony that it was enjoyed was that the doctors ate up everything, which was mighty pleasing to the hostess.

It was the largest meeting of doctors held at a county meeting this year by this society, forty-seven doctors being present.

Dr. Alfred Henry gave a very interesting talk on tuberculosis, illustrated by some very fine slides. The paper was discussed at length by the doctors present.

The society passed resolutions of respect on the death of Dr. J. W. Studley, an old member of the society, who died on the 21st of July.

A vote of thanks was also tendered Mrs. Priest for the dinner and entertainment furnished.

The next meeting of the society will be held on August 28th.

F. A. PRIEST, Secretary.

CORRESPONDENCE

SHOULD EDITORS PROTECT THEIR READERS?

Chicago, August 20, 1923.

Editor THE JOURNAL:

Under the caption, "Untoward Influences in Advertising," the editor of *The Medical Brief*, of St. Louis, condemns an "organization of physicians" which "passed a resolution setting forth an agreement among its members to purchase their supplies and equipment from advertisers in their State Medical Journals." The editor sums up his objections to such an "agreement" by the statement, "We cannot help feeling that this is a very foolish piece of business."

That depends entirely on the kind of advertising the State Journals accept. If the products and the firms advertised have been carefully investigated, both as to the financial standing of the firms and the medicinal value of their products, then it would seem to be very desirable for readers who cannot themselves make these investigations to agree to accept the results of investigation of their own publications which undertake to guarantee to their readers that both the firms and the products advertised are trustworthy and are believed to be exactly as represented.

A hasty survey of the advertising pages of *The Medical Brief* shows it carries the advertising of twenty pharmaceutical houses whose products have been investigated and on which unfavorable reports have been made either by the Council on Pharmacy and Chemistry or by the Propaganda Department of the American Medical Association. It is presumed that physicians read this journal and these "unaccepted" proprietary products are being published in *The Medical Brief* for the benefit of the readers. In view of the unfavorable reports which have been printed about these "patent" medicines, it is not surprising that the editor of the *Medical Brief* should decline to endorse, or even recommend, his advertisements to his readers. In fact, his criticism of journals that do so recommend their advertisers is a virtual repudiation of his own patrons.

But the time is coming, and in fact is now here, when the readers of medical journals—and lay journals, too—demand that the advertising pages be just as clean and reliable as the editorial and news pages. The subscribers have the right to ask that the publishers protect them from known frauds, and the editor who advertises and

invites his readers to buy products which he knows are not what they are claimed to be is a party to a crime. The editor of the Indiana State Medical Journal must have anticipated what the editor of *The Medical Brief* intended to print when he published in his April number this editorial:

"The Council on Pharmacy and Chemistry of the A. M. A. is a clearing house for the medical profession, where the good in chemical and pharmaceutical specialties is separated from the bad, and where the stamp of approval is placed upon honesty of intent and purpose, and where questionable methods are disapproved and condemned. The organization medical journals, which include the Journal of the A. M. A. and the various state journals, now are conducted on a very high ethical plane, and their advertising pages are as clean ethically as are the reading pages. In other words, these journals attempt to protect the readers from either intentional or unintentional fraud, and from all practices that may be considered questionable from any point of view of the ethical doctor. No unfair nor discriminating influence can be purchased by an advertising contract, nor are the editors intimidated by threats of any kind. The advertising pages could be made very much more profitable if these efforts to safeguard interests of the medical profession were not followed so rigidly, but the editors and managers of the organization medical journals all feel that there is a moral obligation at stake and they are not going to lower the standard for the sake of the pecuniary gain that might be secured."

The medical journals which are willing to sustain pecuniary loss to protect their readers have a moral right to expect their readers to reciprocate by patronizing guaranteed advertisers. The journals which print all advertisements offered them, regardless of their known fraudulent character, have no right to expect their readers to trust their advertising pages, and may be suspected of having a personal motive for criticizing any "agreement" to patronize the advertisers of journals whose pages are trustworthy.—E. W. WIGGINS.

FRAUDULENT USE OF MEDICAL LICENSE

Worthington, Indiana, August 10, 1923.

Editor THE JOURNAL:

There is a man going over the state practicing medicine and registering from county to county under the name of Jacob B. Young. He is a fraud and has no license and is consequently practicing without license. He has been at New Harmony, Seymour, and at Kendallville and that is as far as I have been able to trace him.

He obtained possession of my license by a smooth trick. Any information leading up to my ability to get hold of him will be appreciated. Am ready to file an affidavit against him.

Yours truly,

DR. JACOB B. YOUNG.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

PROTEIN MIXTURES FOR DIAGNOSIS.—Mixtures of two or more pollen, epidermal or food protein preparations. These mixtures are supplied in order that the number of skin tests to determine sensitiveness to proteins may be reduced. If sensitiveness to a given protein mixture is found, then tests are made with the individual proteins contained in the mixture. (See Pollen and Epidermal Extracts and Biologically Reactive Food Proteins, New and Nonofficial Remedies, 1923, p. 234.)

GROUP ALLERGENS DIAGNOSTIC-SQUIBB.—A mixture of two or more allergens-Squibb in equal proportions. These protein mixtures are used to determine sensitiveness to proteins (see preceding article, Protein Mixtures

for Diagnosis). Group Allergens-Squibb are marketed in vials containing 0.025 Gm. The following Group Allergens-Squibb have been accepted: Group Allergens-Squibb Type I (Beet, Carrot, Parsnip, Radish, Turnip); Group Allergens-Squibb Type II (Cabbage, Celery, Lettuce, Onion, Spinach); Group Allergens-Squibb Type III (Artichoke, Asparagus, Cauliflower, Rhubarb, String Bean); Group Allergens-Squibb Type IV (Cucumber, Egg Plant, Pumpkin, Squash, Tomato); Group Allergens-Squibb Type VI (Apricot, Cherry, Peach, Plum, Prune); Group Allergens-Squibb Type VII (Cantaloupe, Grapefruit, Lemon, Orange, Watermelon); Group Allergens-Squibb Type VIII (Apple, Banana, Pear, Pineapple, Fig); Group Allergens-Squibb Type IX (Almond, Chestnut, Filbert, Hazelnut, Peanut); Group Allergens-Squibb Type X (Black Walnut, Brazil Nut, English Walnut, Hickory Nut, Pecan); Group Allergens-Squibb Type XI (Barley, Buckwheat, Corn, Oats, Rice); Group Allergens-Squibb Type XII (Beef, Goat, Horse, Pork, Mutton); Group Allergens-Squibb Type XIV (Chicken, Duck, Goose, Guinea-Hen, Turkey); Group Allergens-Squibb Type XV (Blue Fish, Codfish, Haddock, Halibut, Mackerel); Group Allergens-Squibb Type XVI (Butterfish, Salmon, Sea Bass, Sole, Whiting); Group Allergens-Squibb Type XVII (Clam, Oyster, Crab, Lobster, Scallops, Shrimp); Group Allergens-Squibb Type XVIII (Black Pepper, Ginger, Mustard, Paprika, Vanilla); Group Allergens-Squibb Type XIX (Cocoa, Coffee, Tea); **Group Allergens-Squibb Type XX** [Egg (all proteins), Cow's Milk (all proteins), Goat's Milk (all proteins)]; Group Allergens-Squibb Type XXI [Cat (hair), Cow (hair), Dog (hair), Horse (dander), Rabbit (hair)]; Group Allergens-Squibb Type XXII (Chicken, Duck, Goose); Group Allergens-Squibb Type XXVI (Micrococcus Catarrhalis, Pneumococcus I, Pneumococcus II, Pneumococcus III, Pneumococcus IV); Group Allergens-Squibb Type XXVII (Staphylococcus Aureus, Staphylococcus Albus, Staphylococcus Citreus, Streptococcus Pyogenes, Streptococcus Viridans). E. R. Squibb & Sons, New York.

POLLEN ANTIGEN-LEDERLE.—In addition to the products listed in New and Nonofficial Remedies, 1923, p. 239, the following have been accepted: Annual Salt Bush Pollen Antigen-Lederle; Bermuda Grass Pollen Antigen-Lederle; Cocklebur Pollen Antigen-Lederle; Johnson Grass Pollen Antigen-Lederle; Mountain Cedar Pollen Antigen-Lederle; Mugwort Pollen Antigen-Lederle; Oak Pollen Antigen-Lederle; Orchard Grass Pollen Antigen-Lederle; Perennial Rye Grass Pollen Antigen-Lederle; Rabbit Bush Pollen Antigen-Lederle; Red-root Pigweed Pollen Antigen-Lederle; Russian Thistle Pollen Antigen-Lederle; Spiny Amaranth Pollen Antigen-Lederle; Yellow Dock Pollen Antigen-Lederle. Lederle Antitoxin Laboratories, New York.—(*Jour. A. M. A.*, Aug. 4, 1923, p. 393).

PROTEIN EXTRACTS DIAGNOSTIC-P. D. & Co.—Protein extracts in the form of paste the base of which is a mixture of glycerin and powdered boric acid. One part represents one part of original material. For a discussion of the actions, and uses and dosage, see Pollen and Epidermal Preparations and Biologically Reactive Food Proteins, New and Nonofficial Remedies, 1923, p. 234. Protein Extracts Diagnostic-P. D. & Co. are marketed in collapsible tubes containing sufficient material for fifty tests. The following products have been accepted: Almond Protein Extract Diagnostic-P. D. & Co.; Apple Protein Extract Diagnostic-P. D. & Co.; Asparagus Protein Extract Diagnostic-P. D. & Co.; Banana Protein Extract Diagnostic-P. D. & Co.; Barley Protein Extract Diagnostic-P. D. & Co.; Bean (Lima) Protein Extract Diagnostic-P. D. & Co.; Bean (Navy) Protein Extract Diagnostic-P. D. & Co.; Bean (String) Protein Extract Diagnostic-P. D. & Co.; Beef Protein Extract Diagnostic-P. D. & Co.; Beef Serum Protein Extract Diagnostic-P. D. & Co.; Blackberry Protein Extract Diagnostic-P. D. & Co.; Black Pepper Protein Extract Diagnostic-P. D.

& Co.; Black Walnut Protein Extract Diagnostic-P. D. & Co.; Bluefish Protein Extract Diagnostic-P. D. & Co.; Brazil Nut Protein Extract Diagnostic-P. D. & Co.; Buckwheat Protein Extract Diagnostic-P. D. & Co.; Butternut Protein Extract Diagnostic-P. D. & Co.; Cabbage Protein Extract Diagnostic-P. D. & Co.; Cantaloupe Protein Extract Diagnostic-P. D. & Co.; Carrot Protein Extract Diagnostic-P. D. & Co.; Cat Hair Protein Extract Diagnostic-P. D. & Co.; Cattle Hair Protein Extract Diagnostic-P. D. & Co.; Celery Protein Extract Diagnostic-P. D. & Co.; Cheese Protein Extract Diagnostic-P. D. & Co.; Cherry Protein Extract Diagnostic-P. D. & Co.; Chestnut Protein Extract Diagnostic-P. D. & Co.; Chicken Protein Extract Diagnostic-P. D. & Co.; Chicken Feathers Protein Extract Diagnostic-P. D. & Co.; Clam Protein Extract Diagnostic-P. D. & Co.; Cocoa Protein Extract Diagnostic-P. D. & Co.; Codfish Protein Extract Diagnostic-P. D. & Co.; Coffee Protein Extract Diagnostic-P. D. & Co.; Corn Protein Extract Diagnostic-P. D. & Co.; Crab Protein Extract Diagnostic-P. D. & Co.; Cucumber Protein Extract Diagnostic-P. D. & Co.; Dog Hair Protein Extract Diagnostic-P. D. & Co.; Duck Protein Extract Diagnostic-P. D. & Co.; Duck Feathers Protein Extract Diagnostic-P. D. & Co.; Egg (all proteins) Protein Extract Diagnostic-P. D. & Co.; Egg White Protein Extract Diagnostic-P. D. & Co.; Egg Yolk Protein Extract Diagnostic-P. D. & Co.; Eggplant Protein Extract Diagnostic-P. D. & Co.; English Walnut Protein Extract Diagnostic-P. D. & Co.; Fig Protein Extract Diagnostic-P. D. & Co.; Garlic Protein Extract Diagnostic-P. D. & Co.; Ginger Protein Extract Diagnostic-P. D. & Co.; Goose Protein Extract Diagnostic-P. D. & Co.; Goose Feathers Protein Extract Diagnostic-P. D. & Co.; Grapefruit Protein Extract Diagnostic-P. D. & Co.; Guinea-hen Protein Extract Diagnostic-P. D. & Co.; Guinea Pig Hair Protein Extract Diagnostic-P. D. & Co.; Haddock Protein Extract Diagnostic-P. D. & Co.; Halibut Protein Extract Diagnostic-P. D. & Co.; Herring Protein Extract Diagnostic-P. D. & Co.; Hickory Nut Protein Extract Diagnostic-P. D. & Co.; Horse Hair Protein Extract Diagnostic-P. D. & Co.; Horse Serum Protein Extract Diagnostic-P. D. & Co.; Juniper Pollen Protein Extract Diagnostic-P. D. & Co.; Lamb Protein Extract Diagnostic-P. D. & Co.; Lemon Protein Extract Diagnostic-P. D. & Co.; Lettuce Protein Extract Diagnostic-P. D. & Co.; Lobster Protein Extract Diagnostic-P. D. & Co.; Mackerel Protein Extract Diagnostic-P. D. & Co.; Milk (Cow's) (all proteins) Protein Extract Diagnostic-P. D. & Co.; Milk (Human) Protein Extract Diagnostic-P. D. & Co.; Mugwort (wormwood) Pollen Protein Extract Diagnostic-P. D. & Co.; Mustard Protein Extract Diagnostic-P. D. & Co.; Mutton Protein Extract Diagnostic-P. D. & Co.; Oat Pollen Protein Extract Diagnostic-P. D. & Co.; Orris Root Protein Extract Diagnostic-P. D. & Co.; Oatmeal Protein Extract Diagnostic-P. D. & Co.; Onion Protein Extract Diagnostic-P. D. & Co.; Orange Protein Extract Diagnostic-P. D. & Co.; Oyster Protein Extract Diagnostic-P. D. & Co.; Parsnip Protein Extract Diagnostic-P. D. & Co.; Pea Protein Extract Diagnostic-P. D. & Co.; Peach Protein Extract Diagnostic-P. D. & Co.; Peanut Protein Extract Diagnostic-P. D. & Co.; Pear Protein Extract Diagnostic-P. D. & Co.; Pecan Protein Extract Diagnostic-P. D. & Co.; Pepper (Sweet) Protein Extract Diagnostic-P. D. & Co.; Perch Protein Extract Diagnostic-P. D. & Co.; Pike Protein Extract Diagnostic-P. D. & Co.; Pineapple Protein Extract Diagnostic-P. D. & Co.; Paprika Protein Extract Diagnostic-P. D. & Co.; Plum Protein Extract Diagnostic-P. D. & Co.; Pork Protein Extract Diagnostic-P. D. & Co.; Prune Protein Extract Diagnostic-P. D. & Co.; Potato (Sweet) Protein Extract Diagnostic-P. D. & Co.; Potato (White) Protein Extract Diagnostic-P. D. & Co.; Pumpkin Protein Extract Diagnostic-P. D. & Co.; Rabbit Hair Protein Extract Diagnostic-P. D. & Co.; Radish Protein

Extract Diagnostic-P. D. & Co.; Ragweed Pollen Protein Extract Diagnostic-P. D. & Co.; Raspberry Protein Extract Diagnostic-P. D. & Co.; Red Pepper Protein Extract Diagnostic-P. D. & Co.; Redtop Pollen Protein Extract Diagnostic-P. D. & Co.; Rhubarb Protein Extract Diagnostic-P. D. & Co.; Rice Protein Extract Diagnostic-P. D. & Co.; Russian Thistle Pollen Protein Extract Diagnostic-P. D. & Co.; Rye Protein Extract Diagnostic-P. D. & Co.; Rye Pollen Protein Extract Diagnostic-P. D. & Co.; Sage Protein Extract Diagnostic-P. D. & Co.; Salmon Protein Extract Diagnostic-P. D. & Co.; Scallop Protein Extract Diagnostic-P. D. & Co.; Shad Protein Extract Diagnostic-P. D. & Co.; Sheep Wool Protein Extract Diagnostic-P. D. & Co.; Shrimp Protein Extract Diagnostic-P. D. & Co.; Smelt Protein Extract Diagnostic-P. D. & Co.; Sole Protein Extract Diagnostic-P. D. & Co.; Spinach Protein Extract Diagnostic-P. D. & Co.; Squab Protein Extract Diagnostic-P. D. & Co.; Squash Protein Extract Diagnostic-P. D. & Co.; Strawberry Protein Extract Diagnostic-P. D. & Co.; Tea Protein Extract Diagnostic-P. D. & Co.; Timothy Pollen Protein Extract Diagnostic-P. D. & Co.; Tomato Protein Extract Diagnostic-P. D. & Co.; Turkey Protein Extract Diagnostic-P. D. & Co.; Turnip Protein Extract Diagnostic-P. D. & Co.; Veal Protein Extract Diagnostic-P. D. & Co.; Watermelon Protein Extract Diagnostic-P. D. & Co.; Wheat Protein Extract Diagnostic-P. D. & Co. Parke, Davis & Co., Detroit.

GROUP PROTEIN EXTRACTS DIAGNOSTIC-P. D. & Co.—A mixture in equal proportions of two or more Protein Extracts Diagnostic-P. D. & Co. For a discussion of the actions, uses and dosage, see preceding article, Protein Mixtures for Diagnosis. Group Protein Extracts Diagnostic-P. D. & Co. are marketed in collapsible tubes containing sufficient material for fifty tests. The following products have been accepted: Protein Extracts Diagnostic-P. D. & Co. Group 1 (Beef, Lamb, Pork, Veal, Mutton); Protein Extracts Diagnostic-P. D. & Co. Group 2 [Milk (all proteins), Egg (all proteins), Cheese, Human Milk]; Protein Extracts Diagnostic-P. D. & Co. Group 3 (Codfish, Haddock, Halibut, Herring, Mackerel, Smelt); Protein Extracts Diagnostic-P. D. & Co. Group 4 (Perch, Pike, Salmon, Bluefish, Shad, Sole); Protein Extracts Diagnostic-P. D. & Co. Group 5 (Chicken, Duck, Goose, Turkey, Squab, Guinea-Hen); Protein Extracts Diagnostic-P. D. & Co. Group 6 (Clam, Oyster, Shrimp, Scallop, Lobster, Crab); Protein Extracts Diagnostic-P. D. & Co. Group 7 (White Potato, Sweet Potato, Beet, Turnip, Carrot); Protein Extracts Diagnostic-P. D. & Co. Group 9 (Celery, Asparagus, Onion, Eggplant, Radish, Garlic); Protein Extracts Diagnostic-P. D. & Co. Group 11 (Pumpkin, Squash, Cucumber, Sweet Peppers, Tomato, Rhubarb); Protein Extracts Diagnostic-P. D. & Co. Group 12 (Chestnut, Peanut, Pecan, Almond); Protein Extracts Diagnostic-P. D. & Co. Group 13 (Black Walnut, Brazil Nut, English Walnut, Hickory Nut, Butternut); Protein Extracts Diagnostic-P. D. & Co. Group 14 (Wheat, Rye, Buckwheat); Protein Extracts Diagnostic-P. D. & Co. Group 15 (Rice, Oatmeal, Barley, Corn); Protein Extracts Diagnostic-P. D. & Co. Group 16 (Apple, Pear, Prune, Plum, Fig); Protein Extracts Diagnostic-P. D. & Co. Group 17 (Cantaloupe, Watermelon, Peach, Cherry, Banana, Pineapple); Protein Extracts Diagnostic-P. D. & Co. Group 18 (Orange, Lemon, Grapefruit, Strawberry, Blackberry, Raspberry); Protein Extracts Diagnostic-P. D. & Co. Group 19 (Coffee, Tea, Cocoa); Protein Extracts Diagnostic-P. D. & Co. Group 24 [Hair (cattle), Hair (cat), Hair (dog), Hair (horse)]; Protein Extracts Diagnostic-P. D. & Co. Group 25 [Hair (rabbit), Hair (guinea-pig), Wool (sheep)]; Protein Extracts Diagnostic-P. D. & Co. Group 26 [Feathers (chicken), Feathers (duck), Feathers (goose)]; Protein Extracts Diagnostic-P. D. & Co. Group 27 (Gin-

ger, Mustard, Pepper (black), Pepper (red), Paprika, Sage). Parke, Davis & Co., Detroit.—(*Jour. A. M. A.*, Aug. 11, 1923, p. 477).

ELIXIR OF LUMINAL.—Each 4 Cc. (one fluidrachm) contains 0.015 Gm. ($\frac{1}{4}$ grain) of luminal in a menstruum containing alcohol 20 percent. For a discussion of the actions, uses and dosage of luminal, see New and Nonofficial Remedies, 1923, p. 63. Winthrop Chemical Co., New York.

SCARLET RED MEDICINAL—"NATIONAL".—A brand of scarlet R. medicinal Biebrich-N. N. R. For a discussion of the actions, uses and dosage of scarlet R. medicinal Biebrich, see New and Nonofficial Remedies, 1923, p. 275. National Aniline & Chemical Co., New York.—(*Jour. A. M. A.*, August 18, 1923, p. 548).

PROPAGANDA FOR REFORM

COLLOSOLO CALCIUM.—E. E. Prest (*Brit. Med. J.*, Jan. 14, 1922) recommended a new "collosol" brand of so-called colloidal calcium for the treatment of tuberculosis. T. C. Graves (*Lancet*, Nov. 4, 1922) discussed "Colloidal Calcium in Malnutrition, Chronic Sepsis and Emotional Disturbances". The publications of Prest and Graves serve as uncritical endorsements of another addition to the Collosol preparations. The conclusions reached by Graves concerning the beneficial action in the treatment of "Emotional Disturbances" do not seem justified by the character of the evidence he presents. Such results as he reports are common experiences without the use of medication. There is no basis, either in theory or in the evidence presented, for administering a calcium salt in colloidal form; if advisable, soluble compounds of calcium such as the lactate and chlorid may be administered hypodermatically. Thanks to the timely report of the Council on Pharmacy and Chemistry, the Collosol preparations are not being pushed in the United States though they are being actively exploited in England.—(*Jour. A. M. A.*, Aug. 4, 1923, p. 409).

C-O-M NOT ACCEPTED FOR N. N. R.—The Council on Pharmacy and Chemistry reports that "C-O-M" is the proprietary, noninforming name under which the H. D. Frees Co., Chicago, exploits a preparation which is claimed to be the solution of magnesium citrate of the U. S. Pharmacopeia but to have the advantage over the official preparation in that it keeps indefinitely. The Council refused recognition to "C-O-M" because (1) the application of a proprietary name to a pharmacopoeial article is irrational and a detriment to rational therapy; 2, as solution of magnesium citrate is readily prepared fresh and of standard quality by pharmacists, the claim of stability is not a sufficient warrant for the use of a proprietary name for an official article; 3, the therapeutic claims for C-O-M are unwarranted, and 4, the advertising propaganda is likely to lead to the excessive and ill-advised use of the preparation by the public.—(*Jour. A. M. A.*, Aug. 11, 1923, p. 493).

TWO MORE ELECTRONIC DIAGNOSES.—A physician reports that one of his patients became alarmed by a diagnosis of generalized carcinoma made by an osteopath who is a disciple of Albert Abrams. In order to test the diagnostic ability of this disciple of Abrams the physician had the patient send the Abrams disciple a specimen of blood (which was taken from a young rooster who had been confined to his coop since birth) for diagnosis. The diagnosis which was received showed syphilis, gonorrhea, generalized carcinoma, sarcoma of the spine, chronic malaria and diabetes. Another physician reports a diagnosis made by an Abrams follower on a man who is working and by no means ready to die. The diagnosis showed "diminished resistance" (an Abrams euphemism for syphilis), "carcinoma of gall bladder", "streptococcus", "sarcoma of both kidneys, right worse", "tuberculosis both lungs, upper right and middle left", "sarcoma", "gallstones", "malaria," and

"pneumonia."—(*Jour. A. M. A.*, Aug. 11, 1923, p. 493).

BACILLUS ACIDOPHILUS THERAPY.—A method for the preparation of *Bacillus acidophilus* milk has been published by Rettger and Cheplin (*Arch. Int. Med.* Vol. 29:357, March, 1922). Microscopically, *Bacillus acidophilus* closely resembles the *Bacillus bulgaricus*, but cultural methods of distinction have been proposed. The therapeutic value of the various lactic acid ferment preparations is discussed in New and Nonofficial Remedies, 1923. While recent publications give evidence in favor of *Bacillus acidophilus* therapy, W. H. Morriss expresses the belief that whatever beneficial results occurred in the cases reported by him were due to some other factor than the actual transformation of the common intestinal bacteria into the acidophilus type of organism.—(*Jour. A. M. A.*, Aug. 11, 1923, p. 494).

TAPEWORM REMEDIES.—Oleoresin of aspidium and pelletierin tannate are the remedies of choice, the first being more popular. To give the remedies the best chance for action, the intestinal contents should be reduced as much as possible by restriction of solid food and evacuation before the treatment. On the morning of the treatment the patient should stay in bed and be given from 6 to 8 gm. of oleoresin of aspidium divided into as many capsules in the course of 10 to 15 minutes. Two hours later a saline cathartic should be administered and repeated every two hours until thorough evacuation has been secured.—(*Jour. A. M. A.*, Aug. 11, 1923, p. 495).

THE CHLORINE ANTISEPTICS.—The essential attributes of Surgical Solution of Chlorinated Soda-N. N. R. is a definite but mild alkalinity, hypertonicity and presence of the correct amount of sodium hypochlorite. Because hypochlorite solutions are unstable and their active component is not available in solid form, chloramin-T, dichloramin-T and halazone were evolved. The first two have been received as worth-while additions to our materia medica. Because the three products contain their chlorin in its less stable modification, the composition and purity of these products have been watched by the A. M. A. Chemical Laboratory. Recently P. N. Leech of this laboratory reported on the quality of the market supply of American-made chloramin-T, dichloramin-T and halazone, which are described in New and Nonofficial Remedies. Out of eight specimens of chloramin-T, one was considerably substandard, two were slightly substandard and five were satisfactory. The chloramin-T tablets, chloramin-T pastes and an aromatic powder were satisfactory. Two out of four specimens of a surgical powder were markedly decomposed. All the specimens of Council-accepted dichloramin-T complied with the standards. Re-examination of specimens of the chloramin examined five years previously showed that chloramin-T and halazone are quite stable, but the dichloramin-T specimens had decomposed somewhat. Leech believes that both the hypochlorite preparations and the chloramins are active oxidizing agents because of the positively charged chlorin atom which they contain, and that their antiseptic action depends on this. He determined that the oxidizing power of chloramin-T is much greater in neutral than in even slightly alkaline solutions. From this it is apparent that one strength of a solution of pure chloramin-T may be active as a germicide while a solution of the same strength containing sodium bicarbonate may be ineffective.—(*Jour. A. M. A.*, Aug. 18, 1923, p. 581).

IODIN AS A PROPHYLACTIC FOR GOITER.—The conclusion of Marine and Kimball that the administration of iodine constitutes an efficient and safe method of preventing goiter is being amply confirmed. In Switzerland the results appear even more favorable than those reported in this country and the goiter commission of Switzerland has recommended that this method of goiter prevention be instituted as a public health measure throughout the republic. In this country the schools

of Akron, Kent and Revana counties, in Ohio, have been using this method as a routine. It has been employed in Berea and Warren, Ohio, and extensively administered in some of the large factories in Cleveland. This year the schools in East Cleveland, Shaker Heights, Warren, Niles and Findlay, Ohio, Grand Rapids, Michigan, and Hammond, Indiana, are using tablets, each containing 10 mg. of iodine in the form of an organic iodide and each girl takes one tablet a week throughout the year.—(*Jour. A. M. A.*, Aug. 18, 1923, p. 582).

ADMINISTRATION OF IODIDE FOR GOITER.—For the prophylaxis of goiter, Marine and Kimble employed 2 gm. of sodium iodide given in 0.2 gm. doses daily for ten consecutive school days. This was repeated twice yearly. Marine and Kimball state that this amount of iodide is excessive and that 1 gm. of sodium iodide distributed over a longer period would be better. Sodium iodide may be prescribed in solution, a dose to a teaspoonful. If the patient be furnished with a small quantity of potassium iodide—say 1 gm.—and advised to mix it thoroughly with 1 kg. of ordinary table salt for occasional seasoning of his food at the table, he will get all the iodide that is necessary for prophylactic purposes and in an entirely unobjectionable manner.—(*Jour. A. M. A.*, Aug. 18, 1923, p. 598).

BISMUTH PREPARATIONS IN SYPHILIS.—The Council has issued a statement of the present status of bismuth preparations in the treatment of syphilis. In this report the history of the use of bismuth salts in the treatment of syphilis is reviewed, the evidence for the value of bismuth salts as compared with mercury preparations and arsphenamine is considered and the dosage and danger of untoward effects are discussed. The statement of the Council concludes with the following summary:

1. Bismuth preparations have a sufficient experimental basis both for their favorable effects and limitations. The advantage consists in their distinct action on experimental syphilis. The limitations are clear, if one considers the disproportion between the large dose, which is necessary to sterilize an animal, and the small dose, which can be tolerated by man. The available information appears to show that bismuth preparations will not cure syphilis, when used alone.

2. Bismuth treatment is not usually injurious if the necessary precautions (observations for beginning stomatitis, examination of urine, etc.) are observed. Intravenous injection is to be avoided strictly. The therapeutic effect of bismuth is rated by the majority of authors between arsphenamine and mercury. Bismuth compounds may be valuable in cases in which the patients are intolerant to the other drugs used in the treatment of syphilis or resistant to them, as shown by a persistent positive Wassermann reaction.—(*Jour. A. M. A.*, Aug. 25, 1923, p. 661).

THE THYROID HORMONE.—The fact that the iodine-bearing compound, thyroxine, which has been isolated from thyroid tissue, has a marked physiologic potency has led many persons to speak of it off-hand as the "active principle" of the thyroid glands. However, Reid Hunt has carried out tests which indicated that for certain functions at least, thyroxine shows less potency than an equivalent dose of iodine in the form of the entire thyroid gland. One is led to ask, whether the iodized protein fragment represented by thyroxine retains all of the specific physiologic action of the real thyroid hormone. Hektoen, Carlson and Schulhof report that they have detected the presence of a thyroid product, thyroglobulin, in the lymph issuing from the thyroid gland, but failed to detect the same protein in the blood stream.—(*Jour. A. M. A.*, Aug. 25, 1923, p. 665).

ALBARGIN NOT ACCEPTED FOR N. N. R.—The Council on Pharmacy and Chemistry declares Albargin inadmissible to New and Nonofficial Remedies because (1) it is an unessential modification of silver nitrate and (2) the therapeutic claims made for it are unwarranted. Albargin is a product of the Farbwerke, vorm. Meister,

Lucius and Bruening, Hoechst, a. M., Germany, marketed in the United States by the H. A. Metz Laboratories, New York. It is claimed to be a compound of silver nitrate with gelatose containing 15 percent. of silver. Albargin is claimed to combine the advantages of albumin compounds of silver and of silver nitrate. It is claimed to dialyze through animal membrane and, therefore, to possess far greater power than other albumin compounds of silver. It is claimed to produce neither irritation nor pain. The Council found that the silver of Albargin was not combined with the gelatose, but is in the same condition as the silver of silver nitrate; that it does not dialyze through animal membrane and that its antiseptic value is the same as that of a silver nitrate solution of equal silver content.—(*Jour. A. M. A.*, Aug. 25, 1923, p. 677).

COATING FOR PILLS TO RESIST GASTRIC JUICE.—The attempt to prepare pills, tablets or capsules which will pass the stomach unchanged but which will disintegrate in the intestine has not proved very successful. In the main the attempt has been to coat such pills, tablets or capsules (a) with keratin or phenyl salicylate (salol), (b) with gelatin rendered insoluble by treatment with formaldehyd, and (c) by mixing the drug with wax, solid fats or paraffin. Keratin coating has been reported unsatisfactory by the A. M. A. Chemical Laboratory. Coating with phenyl salicylate has the objection that the coating is brittle and that it requires the administration of a considerable dose of phenyl salicylate. The difficulty in the coating with hardened gelatin is that, if the treatment with formaldehyd is insufficient, the pills will not pass the stomach unchanged and, if the treatment is prolonged, the coating will not disintegrate in the intestine. Favorable reports have been published of the method of combining drugs such as sodium carbonate, potassium iodid, sodium salicylate, etc., with mutton suet and paraffin or with a mixture of beeswax and castor oil previously melted together.—(*Jour. A. M. A.*, Aug. 25, 1923, p. 679).

BOOK REVIEWS

NON-SURGICAL DRAINAGE OF THE GALL TRACT. By B. B. Vincent Lyon, A.B., M.D., Chief of Clinic, Gastro-Intestinal Department of the Jefferson Hospital. Cloth. Price \$10. Pp. 640, with 185 illustrations. Philadelphia: Lea & Febiger, 1923.

This is an exhaustive and exhausting treatise on the use of the duodenal tube in the diagnosis and treatment of derangements of the biliary tract. The book is also a presentation of the "author's plan of a systematic and practical method of studying the gastro-intestinal tract as a whole". It embraces an interesting chapter on the Roentgen Ray Diagnosis of Gall-Bladder Disease by Willis F. Manges as well as a section by William Fitch Cheney on the "Clinical Differential Diagnosis of Gall-Bladder Disease". Dr. Lyon is, of course, familiar with his subject—it is distinctly his procedure, so he may be pardoned for being overenthusiastic regarding its possibilities and extravagant in its praise. As an illustration of Dr. Lyon's regard for "Non-Surgical Drainage" we quote the following: "As seen by the foregoing case reports, pernicious anemia, grave secondary anemias, hepatic cirrhosis, toxic cholecystodochitis, toxic cholangitis and toxic hepatitis may be benefited by non-surgical drainage of the biliary system. Certain cases of diabetes have been treated and an improvement secured considerably beyond their high point reached by modern dietetic methods." This book will be found of value to all medical men including surgical specialists. The method, in the opinion of the reviewer, will be found of distinct value in about one-fourth of the cases of biliary disease. If it is of value in even one case in four then this book demands study and attention.

EPIDEMIOLOGY AND PUBLIC HEALTH. Volume II, Nutritional Disorders, Alimentary Infections and Percutaneous Infections. By Victor C. Vaughn, M.D., L.L.D., Emeritus Professor of Hygiene in the University of Michigan. Cloth. Price \$9. Pp. 917, with 53 illustrations. St. Louis: The C. V. Mosby Company, 1923.

The appearance of this second volume of Vaughn's monumental work will be greeted with approval by all those who are interested in public health. The author attempts to group the diseases according to the avenues through which the virus reaches and infects the body, and he does not hesitate to cover such a wide variety of subjects as accessory food factors, endemic goitre and cretinism, typhoid, tetanus and snake bite. We agree with him in his statement that this attempt at grouping "has been only partially successful". Venereal diseases and public health administration have been reserved for the third volume. Naturally, the chapter on the typhoid fevers is the largest of all the thirty-five chapters. Too much importance cannot be attached to the author's statement, regarding typhoid vaccination, that "it would be a great misfortune indeed if either the medical profession or the laity should get the idea that vaccination does away with the necessity of sanitation". It is evident that the author has had no personal experience with many of the diseases considered in this volume. However, his careful study of the literature has enabled him to present the latest and best scientific views. He is correct in insisting upon the difference in scope between epidemiology and bacteriology, as "the former is much broader and embraces the latter".

COLLECTED PAPERS FROM THE WASHINGTON UNIVERSITY SCHOOL OF MEDICINE. Volume 1, 1921. Cloth. Price \$12. With 347 illustrations. St. Louis: C. V. Mosby Company, 1923.

This volume follows the plan of the well-known "Collected Papers of the Mayo Clinic". It is obviously impossible to review a work of this character which presents sixty-nine papers on a very wide variety of subjects. We find among the list of authors such men as Dock, Blair, Crossen, Evarts, Graham, Sluder, Opie, Allison and Leo Loeb, so this volume compares very favorably with similar publications. It is a real pleasure to note that "this is the first of a series of annuals which will be published under this title". The Committee on Publication, which had charge of the selection of papers from the large amount of available material, "felt that the volume should have an interest which would be predominately clinical." All clinicians will find a wealth of valuable material in this collection and we trust that it will find a very wide circulation.

INFLAMMATION IN BONES AND JOINTS. By Leonard W. Ely, M.D., Associate Professor of Surgery, Stanford University. Philadelphia and London: J. B. Lippincott Company, 1923.

Dr. Ely has developed a most interesting monograph on the subject of inflammation in bones and joints. The chief value of the book, as the author remarks, "is its exposition of the results of original research, and of the work in the pathological laboratory, and the correlation of this work with clinical findings." The author emphasizes and reemphasizes his opinion that "bone tissue itself is not subject to inflammation, nor actively to disease, and simply reacts to disease or change in its contained marrow". He insists that we must not speak of diseases of bone but only of disease *in* bone—all changes in bone tissue are purely passive; the marrow is to be regarded as a chemical laboratory and the bone simply as the building which houses it. In joint inflammations he regards the synovial membrane as the active tissue and the cartilage as the passive, therefore, synovitis

(Continued on Adv. Page xx)

Avoid Breakage at the Knot

by Using **Armour's** Non-Boilable Surgical Catgut Ligatures

They possess every quality the surgeon looks for, tensile strength, pliability, smoothness, absolute sterility. They are made from lambs' gut selected especially for surgical purposes.

WE CAN SUPPLY

Non-Boilable Plain and Chromic, (10, 20, 30 day)
000, 00, 0, 1, 2, 3 and 4, 60 inch lengths.
Non-Boilable, Iodized Ligatures, 00, 0, 1, 2, 3 and 4, 60-inch.

ALSO

Boilable, Plain and Chromic, (10, 20, 30 day (000, 00, 0, 1, 2, 3 and 4, 60-inch and 20-inch.

Booklet on the Endocrines for Medical Men

Suprarenalin Solution 1:1000

*Astringent and
Hemostatic*

The Incomparable
Preparation, water
white, stable and
non-irritating.

1 oz. g. s. bottles

Suprarenalin Ointment 1:1000

Bland with lasting
effects.

$\frac{3}{4}$ oz. tubes

**The PREMIER
Product of Post-
erior Pituitary active
principle.**

Pituitary Liquid (Armour)

Free from preservatives, physiologically standardized 1 c. c. ampoules surgical, $\frac{1}{2}$ c. c. obstetrical. Boxes of six. A reliable oxytocic. Indicated in surgical shock and post partum hemorrhage and after abdominal operations to restore peristalsis.



ARMOUR AND COMPANY

CHICAGO

WALLACE-SOMERVILLE SANITARIUM

Succeeding the Pettet & Wallace Sanitarium

MEMPHIS, TENN.

WALTER R. WALLACE, M.D.
WILLIAM G. SOMERVILLE, M.D.

FOR THE TREATMENT OF

DRUG ADDICTIONS, ALCOHOLISM MENTAL AND NERVOUS DISEASES

Located in the Eastern suburbs of the city.
Sixteen acres of beautiful grounds.
All equipment for care of patients admitted.



Louisville Neuropathic Sanatorium

INCORPORATED

1412 South Sixth Street, Louisville, Kentucky

and Nervous Diseases. Situated in residence portion of the city, yet quiet and retired. Rates furnished upon request.

W. E. GARDNER, A.B., M.D.
Medical Director

W. E. RENDER, M.D.
Resident Physician



BOOK REVIEWS

(Continued from Page 324)

and arthritis are synonymous. At times the author for- and joints. Bone tuberculosis is not accorded separate consideration but is discussed under the heading of joint tuberculosis—"no sharp dividing line can be drawn between an arthritis and a myelitis". Tuberculosis attacks the ends of the long bones, in Ely's opinion, because lymphoid marrow is found in this location and "lymphoid marrow, like lymphoid tissue anywhere in the body, is vulnerable to the tubercle bacillus".

This book should most certainly be studied by anyone who attempts to deal with diseases of bones and joints. We may not agree with many of the author's teachings, but because of Ely's valuable contributions to bone pathology all of his opinions must be given consideration.

ESSENTIALS OF SURGERY. A Textbook of Surgery for Student and Graduate Nurses and for Those Interested in the Care of the Sick. By Archibald Leete McDonald, M.D. Cloth. Price 2.50. Second edition revised. Philadelphia and London: J. B. Lippincott Company.

This second edition follows very closely the same principles which made the first edition a valuable nursing manual. Descriptions of technique have been entirely omitted. Numerous additions have been inserted to bring the information up to date. A new chapter has been added in which the surgical gynecological lesions are described in the same manner as are those of other organs of the body.

NURSING AND NURSING EDUCATION IN THE UNITED STATES. Report of the Committee for the Study of Nursing Education. New York: The Macmillan Company, 1923.

The committee which presents this report was first appointed by the Rockefeller Foundation in January,

1919, to conduct a study of "the proper training of public health nurses". In February, 1920, at the request of the Foundation, the program was broadened to include "a study of general nursing education, with a view to developing a program for further study and for recommendation of further procedure". This book represents the results of the work of this committee and it should be read by all those who are interested in nursing education. No one familiar with the methods in vogue in the average training school for nurses can disagree with the conclusions of the committee. The reviewer would stress the statement that "the three-year course not only should be reduced radically by about one-fourth, but can, in our opinion, be so reduced to the advantage of training". This reduction can be effected by eliminating private duty and reducing the amount of menial work now performed by students. It is shown in the report that as high as four and a half hours per day are wasted by students in non-nursing duties in many hospitals! We trust that the book will not only be read but that it may bear fruit.

CLINICS AND COLLECTED PAPERS OF ST. ELIZABETH'S HOSPITAL, RICHMOND, VIRGINIA. Volume of 1922. Contributed by the Staff. Illustrated by Helen Lorraine. Cloth. Price \$7.50. St. Louis: C. V. Mosby Company, 1923.

This volume is a collection of sixty-six papers by the members of the staff of St. Elizabeth's Hospital; thirty-nine of these papers are by J. Shelton Horsley. It is of interest to note that some of the papers were first published as far back as 1914. But twelve of the sixty-six topics presented deal with internal medicine and clinical pathology. A considerable number of the illustrations in this volume can be found in Dr. Horsley's "Operative Surgery". The reviewer cannot help but wonder whether such a pretentious book was justified by the available material. The book is beautifully printed on good paper and many of the articles will well repay careful reading.

This Journal Protects Its Readers

The advertising pages of this Journal are believed to be *free* from all questionable advertisements. No speculative announcements or unethical products are admitted to these pages.

Subscribers may rely on the *quality* of the goods advertised in this Journal. The firms are believed to be financially and ethically *reliable*. We aim to *protect* our readers.

This Is Your Journal

It becomes, therefore, a privilege, as well as an obligation, of our readers to patronize our advertisers. Let us be consistent as joint owners in our Journal, and buy goods from our patrons.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XVI

OCTOBER, 1923

NUMBER 10

ORIGINAL ARTICLES

OUR MEDICAL PROFESSION AND ITS ACHIEVEMENTS*

CHARLES H. GOOD, M.D.
HUNTINGTON, INDIANA

Members of the Indiana State Medical Association:

I am proud of the privilege to deliver the presidential address before the Indiana State Medical Association on its seventy-fourth anniversary. Seventy-four years is a long time and the period covers a wonderful history of both our country and the medical profession. The Mexican War had just ended; the Nebraska bill was not yet passed and men hoped to see the Union preserved with the abolishment of human slavery and the infamous doctrine that the State was paramount to the Nation. Thank God, both have been destroyed and today no slaves exist in this great Republic and the government knows no master but the will of the people. Three great wars have been fought and the stars and stripes floated victorious in all. These wars were not fought for the aggression of land but for the preservation of the Union, the freedom of an island and in the defense of humanity—noble and inspiring trinity of which we are all proud. Along economical and business lines our progress has been the marvel of the world.

As with the Nation, so with medicine and surgery. That period is the most wonderful of all time. Someone has said we have made more progress than in all the ages before. Yes, the latter part of the nineteenth century and the beginning of the twentieth century has been a truly marvelous period. It was during this time that Pasteur made his wonderful discovery of fermentation, the etiology of disease and the beginning of the studying of bacteriology, which, applied by Lister, made modern surgery what it is today. Preventive medicine is hardly a half century old and our national health law not yet in the fifties. At that time Koch had not yet found the cause of tuberculosis; Behring had not found diphtheria antitoxin and the discovery of the contagiousness

of puerperal fever by Holmes was only four years old. The discovery of the cause of malaria and yellow fever is what made it possible to develop Cuba and to dig the Panama Canal. We never can pay our great debt to such men as Finney, Lavern, Reed and Gorgas, for much as it was Roosevelt's vision and leadership so were the great things made possible by the discoveries of these men. Today because of these discoveries, Cuba and Panama are two of the healthiest spots on the globe. Dr. Walter Reed already has a monument at the Reed Hospital at Washington and the country should see that General Gorgas receives the one indorsed by the American Medical Association; the Gorgas Memorial Institute of Tropical and Preventive Medicine is to take the form of a research laboratory and teaching institute in Panama for those branches of medicine. This would be a great and lasting tribute, one to which we should all contribute, for without his great work both countries would be as in the past, death holes.

The dreaded disease diphtheria is no longer a menace, for by anti-toxin, the Schick test and toxin anti-toxin it almost can be obliterated. The same is true of typhoid fever. There were one hundred cases in the world war and seven thousand in the Spanish-American, the difference between immunization and nothing.

Tuberculosis with its health clinics, sanitariums, modern treatment, rest, food, fresh air and tonics, has been placed third in the death rate, and smallpox no longer scares. Puerperal fever, notwithstanding its known cause for years, still causes too many deaths, but with modern and better obstetrics we hope to see the hour come when no mothers or babies shall lose their lives. No part of medicine is entitled to better care. Science, sanitation and hygiene are laying the golden rails that lead to health and happiness, for without the former it is difficult to get the latter.

The work of the Red Cross has made wonderful strides and the Red Cross and the general nurse have added fame to humanitarian work and woman's duty. The names of hundreds are enshrined in the hearts of all the people because of their wonderful work in peace and war. When in the Civil War there was only one, today there are

*Presidential address delivered before the Indiana State Medical Association, at the Terre Haute session, September, 1923.

148,000. The community nurse, the county hospital and special nurse will act as leaders in the campaign for good health.

The hospital has made the same wonderful advancement. Today there are nearly seven thousand and the community or county hospital in Indiana is doing great work not only in saving the health of the people, but in acting as a health center for the study of all diseases. X-ray, radium, the use of insulin and the treatment of goitre and cancer by surgical and medical means are some of the bright things of this period. Our country's history is no more glorious than that of the art of healing and surgery.

Just as great sanitariums, hospitals and clinics are getting bigger and better each day, so our death rate, both in preventable and pathological diseases, is becoming less and we can dream of that great hour when the allotted period of age will be fulfilled and the lines of Pope become a reality—

A wise physician, skilled our wounds to heal
Is more than armies to the public weal.

I have touched on our achievements and now for a few moments on our year's work. From Muncie to Terre Haute is a short distance and I am proud to say that while our slogan, "Let's go, three thousand members in 1923," has not been fulfilled, we have made a good start. Our secretary says we have more members than during any year since 1917 and with 4,353 members in Indiana January 1, 1923, it looks like we should be successful. If everyone here will get one member our job will be complete. Not quantity but quality makes an organization great, but membership does help. So let's keep up the fight for organized medicine.

One of the new things along health lines which is being carried out is the cooperation between the National Health Council and the State Health Board. I appointed a member of the committee to attend and he has been continued on the committee to help carry out the great work. In speaking of it the *Saturday Evening Post* says the following: "Few laymen realize the extraordinary advances which have been made in recent years in the art of detecting and identifying dangerous maladies in their earlier and less apparent state—when these physical examinations are made year in and year out by the same medical man they are bound to have cumulative value. Viewed from every possible angle, this personal audit habit strikes us as one of the most sensible and admirable fashions that has come in vogue for many years. Annual physical stock-taking is just as truly a sign of prudence and sanity as regular open air exercise or the buying of a life insurance." A health examination on one's birthday for one who is well may sound a little like the Chinese custom of paying the doctor to keep well

and killing him if the patient dies, but it certainly is in line with Franklin's motto, "Prevention of disease is better than cure." So I trust the Indiana State Medical Association will endorse the work that already has been done by the American Medical Association.

The greatest achievement of the year in Indiana has been that an Indiana pharmaceutical house has been given the special privilege to manufacture the new remedy for diabetes, insulin. The method of its discovery and wonderful research again has demonstrated what scientific medicine is doing for the people. No doubt claims have and will be made by some that time will prove untrue, but the names of Dr. Banting and Dr. Beck will be honored always for their great work.

No charlatanism or quackery has been permitted and the methods pursued by those in control are to be commended by all medical men.

The medical department of the University of Indiana is making great progress and all Indiana physicians are proud of its great work. In every county of the state I have found its graduates the active and leading men and I am sure I voice the sentiment of all here that it may continue its already successful career and that its graduates will still be as generous to us "Rush men" as you have been in the past two years in the selection of your presidents. In the selection of your officers last year you doubtless meant to pay honor to the general practitioner and I assure you we appreciate it and shall do our best to stimulate the great march of our profession.

It has been said that from 80 to 90 percent of all diseases can be treated successfully by the general practitioner. If that be true the field is certainly a large one. The other day I read something like this in one of our medical journals: "Every student should receive instruction so that he is able to recognize urologic conditions and differentiate them." That is true, but then he adds: "He must know the use of the cystoscope and what data can be obtained with it and the uretal catheter, the indications for pyelography and the information it affords." Now the truth of the whole business is that if he is able to pass a catheter without doing internal damage and to give the necessary medical treatment and pilot his patient along and, if old, keep him for ten or a dozen years, he is doing well; otherwise, he had better turn him over to a specialist for cystoscopy, etc.

It certainly is necessary for the general practitioner to know about the use of these things, but it is much better to do the things well that he can do than to do those things he doesn't know about, and the more efficient he becomes in those things the better doctor he is. The laboratory test should be left to the specialist or the state laboratory for the indigent and communicable diseases and our excellent laboratories and hospitals.

The country doctor is faring quite well. The cry that he is dying out has been found by investigation in New York and Minnesota to be, as Mark Twain said of his death, "greatly exaggerated". The greater part of his work is medical and the post-graduate training should be in obstetrics, internal medicine, pediatrics, minor surgery and general laboratory, with special ability to diagnose acute surgical cases like ectopic pregnancy, appendicitis, obstruction of bowels and mastoid abscess. The family physician has not disappeared but has changed, and he will be much more exact and scientific and will serve his fellows better than in the past.

With good roads, automobiles and even flying machines there are few Indiana neighborhoods that can't be reached. The tendency to have more scientific papers at our county and district meetings has improved greatly the opportunities of the country doctor. He should prepare and read papers through his county and state societies, even if he does cover a great field of information. Every general practitioner should attend his county, district, state and if possible the national meetings and with fair cooperation between specialist and general practitioner, the difficulty will be solved and the standing of the general practitioner maintained.

Along journal lines, our state and nation are well supplied, as both journals are edited ably and are vigorous in their support of all measures for the benefit of the profession, both from a political and educational standpoint. Lately there has been a demand for one to be read by the individual and the community. The House of Delegates of the A. M. A., at the St. Louis session in 1922, met the demand by the issue of *Hygeia*, a beautiful and well edited magazine. Medical men should support it and see that it is placed in all their offices and in public reading rooms so the public will be informed better as to what the profession is doing for good health; and that is the main reason that dedicatory addresses for hospitals and nurses' homes and clubs like Kiwanis, Rotary, Lions, Exchange and Optimists should be delivered by members of the medical profession.

The *Bulletin* should be continued and sent to every medical man, for it contains more public and political reading than any other publication for doctors, as it compiles all the new laws passed by different states.

The new Bureau of Legislation and Legal Medicine to my mind is one of the greatest things the A. M. A. has done for some time, as it keeps an executive secretary on the job all the time. There has been no concerted action on National Legislation. We complain about the Sheppard-Towner bill, narcotic law and some doctors about the Volstead law, but very little real work was done at Washington. We need an all-time bureau

on the job to keep the legislation off the statutes, for after a bill like the Sheppard-Towner bill has been a law it is difficult to prevent the states from accepting it. However obnoxious it is, each state wants its share; so here's more power at Washington to protect the profession, and if we can't pay a high-grade man for such work, we had better shut up shop, or do as was suggested by a member of the Public Policy and Legislative Committee in the last legislature, just let them assume the responsibility and pass what they want. But that would be dodging our duty, for of all men the physician and surgeon knows best what laws are needed to protect the public from contagious and preventable diseases and to help bring about that golden hour when all who are born will live the allotted period—three score and ten, or more. As Abe Martin says, "He knows lots of good Democrats a hundred or more." No, we must not abandon our fight for good medical legislation that will protect the public and be fair to the medical profession, for as Gladstone said, "The nation must protect the health of the people, for that is its richest and best asset." No, it is not our great banks, buildings, factories, ships, that represent our wealth, but healthy, virile people, and the world war demonstrated the real need of restrictive immigration at the source and better health at home, and the medical profession should lead the way.

In time we should have a member of the Cabinet. We are proud that we have a doctor there now, but how much better if all the health departments of the government were under one man and he a member of the President's Cabinet. Since the foundation of the government a number have been added and it seems to me that the one for health of the people should be next. For fifty years we have urged it in our national meetings, so let's continue until victory crowns our effort.

In Indiana we need an all-time secretary of County Health Board. Ohio has one that is optional with the county and most of the counties already have accepted it. We should have such a provision in Indiana, for on the whole the members of the legislature want to do what is best for the people. "As public health is the foundation on which reposes the happiness and the future of the country, the care of public health is the first duty of a statesman." The candidate for governor in an adjoining state said practically the above in his platform, although someone said it was like a mother-hubard—"covered everything and touched nothing." But it at least shows that the politicians and statesmen are getting next to the importance of public health and upholding our medical laws.

The Board of Medical Registration and Examination of Indiana is to be congratulated on enforcing the law, as the medical fraternity must

keep on until our great profession is kept on the high ground we all love to defend and respect. The tendency to cooperation today between doctors, like group practice and partnerships, if kept clean from advertising, is to be commended, for it not only gives the patient a better examination and treatment but furnishes the physician more time for study and advancement.

In regard to our medical educational program, I am speaking only for myself. Since 1904 the campaign for the elimination of sub-standard colleges has gone on until the number has been cut in two—seventy-six A schools and six below. So it looks to me that it is time to call a halt. Two years of preparatory, four of medical and one of hospital training is enough and the council on education should now turn its attention to making the work more practical, so when the young graduate starts in general practice he will be better able for his work. Post-graduate work is getting better and the holding of meetings like those at Muncie and doubling up of counties and inviting able men with scientific papers is doing a great work and will help to keep the general practitioner up to date.

In our legislative work we failed to pass our injunction law, but it was a good rallying cry and helped to defeat obnoxious legislation. The Public Policy and Legislative Committee worked hard for sixty days and right here I want to congratulate Dr. Wm. N. Wishard for his great work in the past. In fact, nearly all the committees I named did their work well. There was no chance to amend the Workmen's Compensation bill as labor was not anxious, neither employers, so it just remained as it was—in my judgment a fairly good bill for the medical profession. We medical men must remember that in legislation the duty of the public is first and no legislation will survive long or be enforced that does not have the endorsement of the people. Our opposition to what is called "state medicine" is on a sound basis and from all appearances the public is against it and with the collapse of bolshevism in Russia and Marxism in Germany we hope it is dead in America. At least I am sure none of the leaders in the medical profession are advocating it. If I could outline a program for the year it would be as follows:

1. Pass the Kosciusko county program for publicity.
2. An all-time secretary and continue the educational work.
3. Federate all health agencies in the state for legislative and health purposes.
4. Join the national health birthday examination.
5. Stand for one medical registration and examination board, each applicant to have fundamental education, then insist that all applicants shall know the fundamentals of medi-

cine and treatment of disease and let him use what he thinks will help his patient.

With legislation to enforce the law, that will be the hardest part, but with cooperation with all health agencies it will appeal to the legislators more. The cults and pathies are numerous, but the truth is there will always be sickness, so let's remember our high and noble ideals, make our calling indispensable and never forget the fact that the Golden Rule is our best guide and with it as our standard, our profession will live when the isms and cults are forgotten. Never forget our patient and our duty to the public. Such work as this will live in the hearts of the people and medicine will remain a most honored profession.

A few days ago in a neighboring county an old-time country doctor died, answered the final summons when in line of duty. When a young man he commenced practicing in that community and for more than fifty years he continued his daily work—growing in the esteem and confidence of all. He went there when the roads were mud and corduroy, no ditches; his means of transportation was afoot. Now we have the automobile. No night was ever too dark, no day too rainy or cold to cause him not to answer the summons at the door or telephone. He was truly the family physician, knew all the children and grown folks in the community, the secrets of the families, in fact, he was about one of them. He was an able man due to his early training and large clinical experience. He was an able diagnostician, the first requisite of a good doctor. A leading surgeon said of him that he was very seldom wrong and all because of the knowledge he gained by history of his families and his treatment of them. I once heard him say that a busy country doctor could not have time to carry out laboratory work and case reports. He must store them in his brain. When the news of his death came to that little town with its "Main Street" they were shocked and in sorrow because they had lost a man, a friend, a helper, and above all a true physician; and on the day they laid him to rest, all business was suspended, the street for blocks was roped off from his home, so that the sorrowing people could all be near the one they loved, and it was said to be the largest funeral ever held in the county, where before him had gone soldiers, statesmen, teachers and preachers, but none loved and honored greater than this country doctor, and he could truly say with the poet:

These are the things I would rather own
 Than scepter or jeweled crown—
 The faith and trust of the friends I've known
 And the love of my own home town.
 For nothing on earth is greater than
 (When the bridge of years is spanned)
 The fair esteem of your fellow-man
 And the love of your native land.

So my young doctor friend, if you are here today, don't think all the glory and fame is in the big city, but out in the little village or town is just as true happiness and success as you will find in the big cities with their great "White Ways".

For after all there is no nobler profession than that of medicine. No greater glory can come to a man than to save a human life, with the scalpel of the surgeon or the remedies of the physician. He who stands at the bedside of the birth of a new born baby is engaged in a holy work and his fee should be his last consideration. A great lawyer at the meeting in memory of a distinguished member of the bar said the old-time lawyer thought first of his service to his client and he was afraid the young lawyer of today thought first of the fee. I hope that is not true, and I hardly think it is, of our great profession. When the world war came our members responded to the call of humanity that has placed our loyalty to flag and country in an undying position and I hope and trust it will ever be as then, humanity and duty first, and then our fee.

Of course, we should be well paid for our services, for I know the old soldier at Warren had it right when he said on contributing a quarter to the campaign fund: "Charley, here's a quarter, you can't run it on wind." Neither can a doctor meet his obligations without remuneration, but after forty years of practice in a country town and a county seat, I have never seen the "righteous forsaken or his seed begging bread". So let's always strive to give service, and that is the best way to answer the appeal of the quack and charlatan, for after all

"It isn't the servants that come at your call
Or the things you possess,
Be they many or nothing at all—
It's service that measures success."

OBSERVATIONS ON SURGERY AND SURGICAL TECHNIQUE*

FROM A STUDY OF 2,500 ANESTHESIAS

FLOYD T. ROMBERGER, M.D.

LAFAYETTE

Records of twenty-five hundred consecutive anesthetics have been studied for this presentation, the number having been arbitrarily chosen as being sufficient to give us a typical cross section of the entire field of surgery. While they are from the records of one anesthetist, yet they do not cover *all* the surgery of any one community, nor of any one hospital, nor of any one surgeon; their diversity makes them the more valuable, for they were collected in the service of thirty-one doctors and thirteen dentists.

There are many lessons to be learned from such an assembly of records, and they might be classi-

fied in various manners to show certain definite relations, but the following was chosen for the sake of brevity and the spice of pointedness.

Classification:

OPERATIONS

Abdominal, pelvic and repair (including 135 gall-bladder surgeries).....	994
Abscess, carbuncle and infections	121
Amputations, major and minor.....	31
Brain surgery and mastoidectomy.....	30
Breast, tumors and amputations.....	32
Curettag, including for diagnosis.....	51
Empyemia	21
Extractions, 1 tooth to 26	86
Eye operations.....	14
Fractures and dislocations	60
Hernia	88
Kidney and bladder surgery, including cystoscopy, ureteral catheterization and prostatectomy	215
Obstetrical, including caesarian section	62
Rectal	91
Thyroidectomy and ligation.....	75
Tonsillectomy	350
Miscellaneous	179
	<hr/>
	2,500

TYPE ANESTHESIA

Ether, open drop	916	36.64%
Gas-ether, closed	103	4.12
Gas-oxygen	1,416	56.64
Chloroform	33	1.32
Ethylchloride	32	1.28
	<hr/>	<hr/>
	2,500	100.00%

For the ether anesthetics ethylchloride was used as an induction agent almost exclusively, ether being continued then by the so-called open drop method.

Chloroform and ethylchloride were administered purely as such on an open mask.

The gas-ether anesthetics were given by a strictly closed method.

The gas-oxygen anesthetics were started and completed as such. Novocaine infiltration along the line of incision and by intramuscular injection was employed in a large percentage of the abdominal surgeries under gas-oxygen. At times various agents were used synergistically with the gas-oxygen, as seemed necessary, or advisable; ether, chloroform, anesthol, paraldehyde, somnoform and ethylene. On account of the wide publicity given to ethylene as an anesthetic agent sufficient was used to determine in our own minds just exactly what its status in present day anesthesia was likely to become.

Blood pressures were taken during operation in a large series of these surgeries for the purpose of cultivating accuracy of observation of the patient's condition, and as a check on the influences of the various surgical trauma.

*Presented before the Section on Surgery of the Indiana State Medical Association, at the Terre Haute Session, September, 1923.

It is essential that these facts remain firmly established in mind so that you may realize that there is no snap judgment being made, no careless words spoken, but only after mature thought, constant observation and repeated confirmation.

In its broadest sense surgical technique covers everything which can or may happen to a patient from the time a surgical condition is diagnosed until that patient leaves the hospital. The right step or the wrong step toward success or toward failure may be taken at any intermediate point. Whether or not, for example, salesmanship is necessary in our profession, it is easy for one who is observant to pick out those patients who have been not only "sold" on their need of surgery, but also have been "sold" on the ability of the hospital, the surgeon himself and his operating team to take care of them, both operatively and post-operatively.

However, we shall confine ourselves to the consideration of a few of those elements most intimately connected with the actual surgery.

Assuming that the surgery is for the purpose of getting the patient well, not merely a scientifically interesting appendix or gall-bladder, it must then be recognized that the alert anesthetist has the premier position on the operating team, for noting those essentials which concern the patient's welfare.

Let us first consider the supply table and its equipment. One cannot assume that nurses have clairvoyant powers; be they ever so well grounded in their work they cannot read the surgeon's mind. If he has a well-developed plan for the surgery he knows what instruments are likely to be used, and, anticipating his needs, it is his duty (or his equally well-informed assistant's) to see that the proper instruments are sterilized *before* the operation. Neglect in this respect tends to the belief that there has been lack of study and lack of a comprehensive outline of the presenting pathology and its clinical manifestations before the surgery. Infrequent indeed should be the occasions which necessitate a nurse to run and sterilize an instrument, suture or drainage.

Further, the nurse should stand a little aside, yet almost back to back to the surgeon, with the supply table drawn close; it saves steps and time.

How do these factors affect the patient? Every minute that the patient lies on the table, say with the abdomen cut open, even though under the anesthetic, even though no especial trauma is being carried on, saps that patient's vitality and lowers his resistance. A continual storm of afferent pain impulses are running to the brain, and though the patient cannot protest, the anesthetic paralyzing motor response, yet it surely tends to a greater post-operative depression. In the comparatively robust this is perhaps of little moment, but we are oft-times dealing with those who are desperately ill, on the border, at the edge of the precipi-

pice; it is for these, who need all in their favor, for whom we must exert our every effort.

Coming to the patient, the anesthetic being started, we are confronted at times with a patient who is prepared inadequately or improperly prepared with reference to preliminary medication. It is difficult to conceive why this is so in the present day. The National Anesthetic Research Society and Associated Anesthetists, through their publications, and various anesthetists throughout the country in individual discussions, have repeatedly emphasized its importance, yet it is being neglected or overlooked.

The rule of morphine 1/4 gr., atropine 1/150 gr., from a half to an hour before operation is, perhaps, well established with some surgeons, and as a routine is as good as any set order could be. It must be emphasized, however, that great flexibility must be obtained. Some types of surgery require more, others less. Again, it must be varied according to age and physical condition of patient, with especial reference to the amount of prostration from the pathology present; but *all* should have and need something, and it should be given long enough in advance to have attained maximum effect, not less than 45 minutes. In case of doubt consult the anesthetist; he is ever ready to be of assistance. In the past we have erred more on the side of under-morphinization rather than over-morphinization.

Let us examine this a little more closely; why is it so essential? In what way does it influence the surgery? In what manner does it affect the post-operative result?

Briefly, anything which helps the anesthesia to be easier, smoother and lighter gives better relaxation and lessens the post-operative depression. More particularly, laying aside all psychological benefits, there are good sound physiological reasons. We must recognize that, basically and fundamentally, all the inhalation anesthetics are narcotics. That is, they so narcotize the brain and spinal cord that motor response to trauma is prevented, with a resulting greater or lesser degree of muscular paralysis and relaxation. Now, by the judicious combination of the narcotizing effect of the opiate group with that of the anesthetic group, it is possible to induce and maintain a satisfactory degree of anesthesia with a greatly diminished amount of the anesthetic agent and with lessened post-operative depression. This in turn means less tax on the patients' elimination, a conservation of their physical power, an enhancement of their recovery. Further, a properly selected preliminary widens the margin of anesthesia with *any* given agent, increases its safety and tends to better relaxation; especially is this true of the evanescent agents such as nitrous oxide.

A still further benefit is derived from preliminary medication in the lessened secretion of

mucus in the respiratory tract. The anesthetist, perhaps being chided by the surgeon, might easily assume the "I should worry" attitude when he hears the mucus boiling in the bronchi and when he sees the froth bubbling from the mouth and nose. But it cuts him to the quick to see that patient becoming pallid, even cyanotic, the system crying for oxygen; the surgeon then bellows for relaxation, while the anesthetist is forced literally to drown the patient with anesthetic to produce a sufficient concentration to penetrate this mucus screen.

Let us look at it further from the viewpoint of physiology. Nature in her great wisdom has placed mucus glands in the respiratory tract for protection, by their secretion, from irritants of all kinds. Anesthetic vapors, especially ether, in sufficient concentration to produce anesthesia, are irritants; hence it is normal for these glands to secrete mucus in their presence. But we must get these vapors into the blood stream or they have no effect. Your knowledge of the laws covering the diffusion of gases must convince you readily that a thin covering of mucus on the air-vesicle wall renders this a difficult matter, that a higher and still higher concentration must be used. Further, the presence of mucus within the bronchi and bronchioles interferes with the free passage of the anesthetic vapors to the air-vesicles. And, most important, it blockades the entrance and exchange of that great life sustaining essential—oxygen. That is the reason these patients are cold, cyanotic, drenched with perspiration, in fact in a state paralleling traumatic shock.

Morphine 1/3 to 3/8 gr. in divided doses, with atropine 1/150 gr., is better than the routine before mentioned for average uses. There is only one untoward result from over-morphinization; central over-depression of the respiratory center, resulting in shallow or halting respiration. In a closed method of anesthesia, such as gas-oxygen or closed gas-ether, this is of no moment, for you always have at hand in the breathing bag a plentiful supply of CO₂, the physiological respiratory stimulant, while in open ether the skilled anesthetist meets the contingency with minimal inconvenience and danger. In very small children, or in adults where morphine is contraindicated, give a suitable dose of atropine. Never allow *any* anesthetic to be started without having a plentiful supply of oxygen almost instantly available.

Concerning the method of anesthesia, without entering into any discussion of the merits of any particular agent, we have come to believe that, in general, one should always endeavor to produce the necessary anesthesia for the surgery at hand by the use of the minimal amount of anesthetic agent. Our colleague, Dr. Guedel, of Indianapolis, in his published work on "Third Stage Ether Anesthesia" has marked a notable advance in our

knowledge of the possibilities in lighter anesthesia, and has given impetus to much thought and research leading to still further developments. However, only through the hearty co-operation of the surgeon can the best results along these lines be attained. Both surgeon and anesthetist must know, and equally well understand, how far they can go, and when each must give in to the other. The surgeon who has not, cannot or will not learn something of Crile's anoci-association, and then use it in adaptable cases, is overlooking a valuable aid to his technique. The blocking of the afferent nerve path from the site of trauma to the brain tends to prevent shock, produces better relaxation and is an essential in the better type anesthesia.

If the case has been studied thoroughly in all its clinical manifestations, the surgical team will have a well-developed plan *before* operation. This is of prime importance; it avoids delay and fosters action, which benefits should accrue to the patient. The surgeon should be prompt in his recognition of gross pathology; skillful, gentle and deft in exploration; a master of the art of sharp dissection; and perfected in the mechanics of surgical technique. Blood pressure readings during anesthesia prove conclusively that there is nothing more damaging than rough handling of the tissues; blunt dissection, mauling, pulling, pawing, three or four hands, or five or six packs in the abdomen. The operating room is not exactly the place to study anatomy, pathology or surgical technique; the dissection or autopsy table is more appropriate.

In this connection quotations from a paper by Dr. A. B. Cooke, of Los Angeles, read during the recent A. M. A. meeting in San Francisco, are apropos:

"There should be some minimum standard of fitness for every man who essays major surgery. In view of the utter impossibility of determining in advance the exact nature of the lesion diagnosed 'appendicitis', would it be in any sense unjust or unreasonable to require of anyone who undertakes such operations that he be competent to handle any condition that may be encountered."

In the discussion which followed Dr. A. J. Ochsner, of Chicago, said, in part: "The physician of little experience should not have the opportunity to open the abdominal cavity."

Dr. Fred Bailey, of St. Louis, said, in part: "The time must come when gross incompetence in any branch of medicine or method shall receive the condemnation of the public as well as the frown of the medical fraternity."

It behooves us all, therefore, to be more than reasonably certain that we are not subjecting our patients to any avoidable hazard. They have a right to expect and demand this from our hands.

Concerning the surgical assistant, the *occasional* assistant should be relegated to the times past. Instead of being of real assistance he often

delays by being, perhaps unavoidably, out of step in the march toward the newer methods and more perfected techniques. A regular assistant is the more useful. His knowledge of surgery and surgical technique must be second only to that of the surgeon. He must follow, evaluate and anticipate the surgeon's every move; thus only is valuable time conserved.

Running through this presentation is an undercurrent of major importance—that of the time element. It is not meant that we should be *hasty*, but rather than we *can* cut operating time by the elimination of *waste*. This means education, organization and teamwork in the nth degree. The period when men boasted that they operated on one patient for hours at a stretch belongs in the dim past. It is quite reasonable to believe that, with proper organization, most surgery can be finished within an hour; if not, it is better to divide the operation into two stages. It will pay, in enhanced post-operative results.

In conclusion it is desired to lay emphasis on the fact that the anesthetist of today wants to stand shoulder to shoulder with his surgeon, each a specialist in his own field. He wants to work not only *with* the surgeon, but *for* him. He wants to deliver a *service*, to both surgeon and patient—that special service of administering an anesthetic as skillfully, safely and humanely as is possible with the present knowledge and equipment—so that the patient may get well.

Given such anesthesia, given such a surgeon, given such an assistant, given such nurses, given such teamwork, then, and then only, can we give our patients that last ounce of ourselves, and that, no less, is what they deserve at our hands.

REFERENCES

- Guedel, A. E.—Third Stage Ether Anesthesia. Amer. Jour. of Surgery, April, 1920, page 53.
Crile, G. W.—Surgical Shock, 2nd edition, page 56.
Cooke, A. B.—Jour. A.M.A., Vol. 81, No. 8, page 627.

DISCUSSION

DR. ETTA CHARLES (Anderson): I wish to stress a few points in Doctor Romberger's paper. First, the patient's pre-surgical care—the pre-medication. I like best one-quarter grain morphin and 1/100 grain atropin or scopolamin, depending on age, sickness, character of operation, weather conditions. If the weather is hot and the air heavy with moisture, I give less of morphin and atropin or scopolamin. All preparation of the patient is made before the hypodermic is given, and all relatives and friends are excluded after the hypodermic is given, the room darkened and absolute quiet enjoined. The badly frightened and nervous patient is a greater risk. He is building up an acidosis before the operation begins.

Our experience with mucus beaten to a stiff froth, the patient cyanotic and rigid, is quite enough to make the anesthetist wait for the effect

of atropin, no matter how urgent the case. I wish to emphasize that part of the doctor's paper.

The surgeon who makes too small an opening and thrusts in a hand too big for it, needlessly traumatizes his patient. More anesthetic must be given, more acidosis is produced. A rough and careless surgeon can spoil the best anesthetic. The same may be said of the after-care. Rough handling, tumbling the patient about, transporting him through cold halls and to a cold bed will spoil the work of the anesthetist.

Then there is the surgeon's side of it. All anesthetists are not good. The surgeon deals with pathology; the anesthetist with the patient's life. All deaths due to the anesthetic are not reported by any means. To give an anesthetic is one thing; to practice the art another. The term "anesthetist" presupposes ability to make an adequate preliminary examination, direct the preparation of the patient and the position on the table, choose suitable anesthetic and produce a smooth induction to keep the patient on the least amount of anesthetic consistent with surgical procedure, instantly recognizing and remedying any untoward symptoms that may arise. Crile demonstrated that one of the outstanding causes of shock is too much ether. Strychnin also produced shock. Don't give strychnin in shock.

The anesthetist shares with the surgeon the strain and fatigue of a difficult operation.

Dr. Frank Bullard very happily puts it:

The surgeon that's snappy,
The surgeon that's scrappy,
The surgeon that scolds every day,
Whose mouth's full of curses,
Who rattles his nurses,
Makes many a deadly delay.

The unprepared man,
With no well laid plan,
Who new tools must e're sterilize,
Who loiters and waits,
Who stops and debates,
Has a job too big for his size.

That too timid cutter,
Who does nothing but putter,
Accomplishes naught I am sure,
But it is pathetic,
How much anesthetic,
The patient has to endure.

The doctor that's sore,
Who hollers, "Give more!"
Whenever the patient may flinch,
May himself be at fault,
By his heavy assault,
That causes the patient to winch.

When wearied and harried,
By thrusts no more parried,
The patient succumbs and is dead,
The surgeon will wonder,
And blame all his blunder,
Upon the anesthetist's head.

Anesthetists are not born, but are evolved by the careful process of evolution and must share

with the surgeon the responsibility of the outcome of the teamwork. There must be no let-up in his attention to detail before, during and after the operation.

DR. W. C. REED (Bloomington): Suppose one strikes a surgeon who violently objects to a pre-anesthetic, and we get this frothy mucus, how do you try to take care of that situation—active removal of the froth, or change of the position of the head?

DR. ETTA CHARLES: My plan is to give a hypodermic of atropin at once, and then turn the patient's face to one side and try to mop out what is there. You cannot put in an airway because you will force the froth down into the bronchi. Of course the anesthetist must lighten the anesthetic, take it away as much as possible without interfering with the surgeon's work. If the operation lasts a little while you begin to get the effect of the atropin.

DR. FLOYD ROMBERGER (closing): My attitude is to leave it to the surgeon. If he insists that the patient shall not have a pre-anesthetic, then he must take the responsibility. It is an embarrassing situation, but in the last analysis the surgeon is the chief and we must give him what he wants. However, I absolutely refuse to assume responsibility for the post-operative condition of the patient.

THE RADICAL CURE OF CYSTOCELE*

C. M. MIX, M.D.

MUNCIE

Anterior colporrhaphy as practiced by the early gynecologists proved entirely inadequate. Recurrence of the cystocele was the inevitable end result. Dührssen (1894) first performed and described the transposition operation, but his work was not recognized until a later date.

Freund (1896) entered the abdominal cavity via the posterior vaginal fornix, brought the uterus down through the incision, made a hole through the fundus for drainage and sutured the uterus in its new location.

Wertheim (1899) used an operation founded upon the principle of the operation described by Watkins in his original communication published in the *American Journal of Obstetrics and Gynecology* in 1899.

Stone (1899) separated the bladder from the uterus and broad ligaments and sutured the incised margins of the vagina as high up on the uterus as the insertion of the round ligaments.

Schanta (1909) claims credit for closing the vaginal flaps over the uterus, a procedure which was done by Watkins eleven years previously.

The names of Watkins, Wertheim and Schanta have become associated with the improvement in

technique and results in plastic operations through the vaginal route for the correction of prolapse of the pelvic viscera through the vagina, which is known as prolapsus uteri, rectocele, cystocele, vaginal hernia, etc.

The steps of the operation are clearly described and illustrated in Watkins' second article, "Transposition of the Uterus and Bladder in the Treatment of Extensive Cystocele and Uterine Prolapse" (*American Journal of Obstetrics and Gynecology*, 1912). These steps are as follows: (1) Separation of the wall of the vagina from the bladder, (2) separation of the bladder from the uterus, (3) incision of the peritoneum, (4) suture of the anterior surface of the uterus to the vaginal wall, (5) thorough repair of the posterior vaginal wall, (6) perineorrhaphy.

This simple, safe procedure provides the basis of starting point for the plastic surgery of the vaginal outlet which has developed in the past thirty years.

It is necessary to understand the anatomy as well as the pathological changes involved in uterine and bladder prolapse in order to get the best results.

Anatomy—The pelvic floor consists of two planes of supporting tissue, an upper and a lower. The upper plane is made up of the pelvic fascia, which is attached to the pelvic bones and which embraces two structures, the rectum and the uterus, and forms the base or floor on which rests the bladder. This upper plane or diaphragm contains reinforcements that support the viscera. For the uterus they are the utero-sacral ligaments behind the broad ligaments and round ligaments laterally and the utero-pubic ligaments or fascia in front, and the fibers which extend more or less radially to the pelvic walls surrounding and supporting the uterus, bladder and rectum. These structures lie above the vagina.

The lower plane lies below the vagina and is made up of the levator ani muscles with its fascial sheaths formed by the recto-vesical fascia in front and the anal fascia behind. There are three openings in this lower plane, the rectum, vaginal introitus and urethra. The rectal opening is well protected by the sharp bend in the canal and the presence of the sphincter ani muscle. The urethra is protected by the small size of its meatus and its location high up under the bony pubic arch. The vaginal opening is the weak place in the vaginal floor. Under normal conditions it is well protected by its position, well forward and out of line of direct pressure, the direction of the canal being such that intra-abdominal pressure tends to close it instead of open it, and by the overlying fibro-muscular plane and body of the uterus.

The third factor in maintaining the integrity of the pelvic floor is the normal anterior position of the corpus uteri. When the uterus is in its

*Presented before the General Meeting of the Indiana State Medical Association, at the Terre Haute Session, September, 1923.

normal anterior position the intra-abdominal pressure is received on the posterior surface of the uterus and deflected widely and evenly to the supporting structures. When the pelvic floor has been torn and the utero-sacral ligaments stretched, the cervix comes down and forward, the corpus uteri goes back and the whole mechanism of support is destroyed and there begins a gradual descent of the uterus, bladder and anterior rectal wall which results in the condition of prolapsus uteri, rectocele and cystocele which so commonly come to the physician and surgeon for relief.

The later mechanical considerations emphasize the importance of taking care of a retroverted uterus. If all lacerations of the perineum were taken care of promptly and the anterior position of the uterus maintained the cases of prolapse of the uterus, bladder and anterior rectal wall would become very rare.

Something over a hundred operations have been described for maintaining the uterus in the anterior position. Without comment as to the efficacy of the other methods I wish to call attention briefly to a simple procedure which I have found useful. In nearly all my pelvic surgery I use the Stimson-Pffannenstiel transverse incision. It is very easy with this incision to introduce a curved forceps through the inguinal canal extraperitoneally along the round ligament, grasp it at about its middle point and bring the doubled loop of round ligament out and suture it to the fascia in the corners of the abdominal wound. In this way the round ligaments are shortened without leaving any raw surfaces. In my opinion this accomplishes as much as any round ligament operation with minimum trauma. For a masterly discussion of the subject of retroversion consult Crossen's *Operative Gynecology*, Chapter 1.

No less complicated from the standpoint of multiplicity of procedures and variability of results is the treatment of prolapsus uteri. Twenty-six useful and fairly well standardized procedures have been described and used by various authors, which should be kept in mind in dealing with the problem of prolapsus uteri.

There are likewise several factors that enter into the problem of surgical treatment: (1) The age of the patient, whether she has passed the menopause or not, (2) whether the uterus is to be preserved and if so, whether as a functioning organ or as a part of mechanical support to the pelvic floor, (3) whether the vaginal route or the abdominal should be chosen depends on the amount of concomitant pelvic pathology; whether the appendix should be removed or not, etc.

Apparently the lay mind is quite clear on this subject. Almost invariably the patient who presents herself to the surgeon has decided "to have everything removed and be done with it". It

requires a great deal of explanation and it is often impossible to convince the patient that in the preservation of the uterus lies one of the factors necessary for successful treatment of her condition.

The following must be kept in mind as essential to successful treatment of cystocele:

1. The perineum must be restored in all cases.
2. The length of the vagina must be maintained.
3. The cervix must be maintained in its normal antero-posterior position. The purse string suture advised by Shultz violates this principle by bringing the cervix too far forward.
4. Adequate support to the base of the bladder must be supplied.
5. The uterus must maintain a permanent anterior position.

Some of the things to be avoided are ventral fixation, incorporation of the uterus in abdominal wall—either *in toto* or after resection, fixation of the stump of the amputated uterus to the abdominal wall, because of the extremely abnormal position and the fact that the abdominal wall does not furnish a fixed point of attachment and even after the operation there is a pulling on this attachment due to the tendency for the prolapse to recur.

In the cases past the menopause or where the function of the uterus as a child-bearing organ need not be preserved the interposition operation, on account of its simplicity and the ease and dispatch with which it can be done fulfills the indications most satisfactorily.

Certain additions or modifications may be necessary to meet individual indications:

1. In case of a seriously diseased cervix, it may seem best to combine with the operation amputation of the cervix.
2. When the uterus is a little too large the lower portion of the uterus may be incorporated with the anterior vaginal wall, allowing the fundus to remain inside the abdominal cavity, but extraperitoneal.
3. When the posterior attachments of the uterus are very much stretched, allowing the cervix to come too far forward and downward, the utero-sacral ligaments can be shortened as an added step to the operation.
4. In case the uterus is much too large it may be reduced in size by partial excision.

In cases where there exists pathology of the corpus uteri that makes its removal imperative, two procedures give excellent results. There are vaginal hysterectomy with low fixation of the pelvic pedicles, or supravaginal hysterectomy with low fixation of pelvic pedicles and incorporation of pedicles and stump of cervix in anterior vaginal wall. This is done through the vaginal route.

There are a host of other variations and modifications that may suggest themselves to the individual operator in each case that comes up. The

first two steps of the Watkins operation give us an opportunity to explore and examine the uterus and adnexia and determine just what procedure will give the best results, keeping in mind the five factors that are necessary to successful repair and permanent results enumerated above.

Many patients complain of dribbling of urine when on their feet. In these cases often a relaxation of the bladder sphincter is the cause. This can be attended to as a part of the interposition operation.

This operation with slight modifications or additions has been done in fifty-three cases at the Muncie Home Hospital and at a private hospital formerly located in Muncie. Of these we are able to trace but forty-one. Of the forty-one only one has returned with an unsatisfactory result. In this case the hypertrophied cervix should have been amputated. Radium was applied in this case and the resulting atrophy of the uterus has given the patient relief from the profuse leucorrhea and bearing down sensation of which she complained on her return.

It has been impossible in the space of a short paper to go into detail in regard to this complicated problem. For those who are interested to pursue the subject further I should recommend Crossen's Operative Gynecology, Chapter II.

I feel confident that by painstaking work along the lines sketched above we can offer the woman with prolapse safe and sure surgical relief.

This subject has special appeal to all of us, for largely we find these cases among the dear old or oldish ladies who have suffered much and borne many burdens in giving the world the present generation of young men and women, our mothers.

DR. D. R. ULMER (Terre Haute): I think the time has come when we as physicians should know more about the female genitalia and quit prescribing so much medicine for nervous diseases without making examination of the pelvis. The only criticism I would offer is the nomenclature. I wonder why the Doctor took the title "Cystocele" instead of taking the whole scope which his paper did. You cannot do a successful perinorrhaphy without repairing the cystocele. You cannot do one operation without doing all of them—all the patient needs.

The Doctor spoke of a hypertrophied cervix. We nearly always find in a case where the patient has borne several children that there is a hypertrophied cervix and an elongated cervix, and it helps to make a retroversion. We should first do the cystocele, then fix the uterus, and in a patient who is not bearing children we should amputate the cervix by some method, and then do a complete perinorrhaphy. In doing that you must know your pelvic anatomy. Select whatever method you wish, but you cannot do one operation without doing all the others.

PHYSIOTHERAPY*

W. W. CAREY, M.D.

FORT WAYNE

The term physiotherapy has become quite common within the last few years and to those who have never investigated it may mean much or little. Its principles and methods of application necessarily would consume too much time and we will be forced to confine ourselves to results only. The degree of success, however, depends upon the knowledge of the modality used and the method of its application. Not everyone who attends a manufacturers' school of physiotherapy is a physiotherapist any more than is a man who amputates a finger a member of the American College of Surgeons.

As I understand it, before a man can be elected to membership in this organization he must have established a reputation of more than average skill, judgment and honesty; this necessarily calls for previous study, research and experience. So it must be with a physiotherapist; he must have given time to study, and better still must have had or have the benefit of a large clientele. No private service would give a man such training as that afforded by the late war, when cases were heaped upon one by the hundreds. Thus with my former study and experience I make bold to offer you the results of some of my work.

Many times surgeons, especially, are urged to operate cases they have seen only a few hours before, for the convenience of the family and family doctor who brings them in. Some of these results have taught us that weak myocardiums with faulty function and lowered kidney function frequently are followed by a restlessness, suspicion and delusions, and later insanity is implanted firmly. Another group occurs in disturbed liver function, with prolonged use of bromides. This type tends to depression and agitation.

Prostate and sex organs under fifty accompanied by bladder and renal disturbances are followed oftentimes by delusional and persecutorial types. Again, nervously exhausted individuals returning to work too soon after operation become irritable, depressed, easily fatigued and soon drift into a psychosis of a neurasthenic type. The physiotherapist is a great aid to this type. He also can aid the surgeon or internist, by giving certain treatments with a definite aim which in the meantime allow him to study his patient. As to the after treatment and how necessary it is, one only need to check his clientele to find how many of one's neurotic patients can be checked up from the time of their operation.

Fractures and dislocations are aided by the absorption of inflammatory products, prevention of atrophy, hastening of bony union; by increasing the nutrition, promoting metabolism and the more

*Presented before the General Meeting of the Indiana State Medical Association at the Terre Haute session, September, 1923.

speedy restoration of function. Rhythmical contraction of the muscles leads to a more splint-like and dense callous which in turn, untreated, is more likely to be of a cauliflower consistency and shape, and if situated near a joint often means complications as to function. The treatment is practically the same—heliotherapy, diathermy, iodides, rest and proper food. The first brings about liquefaction of the diseased tissue and an analgesic effect. Administration of iodine hastens the absorption. The patients are exposed gradually to the sun or ultra-violet ray until the desired reaction occurs. Later, casts and splints should be removed, when possible while the patient is at rest, their duty being for weight relieving purposes only.

Different joints call for different methods, *e. g.*, fracture of the olecranon differs from that of the patella, in that it has greater vitality and seldom suffers from interposition of muscle.

Fractures with delayed union are often dependent on general conditions such as lowered vitality, and when such conditions are known to exist a special treatment should be used.

Dislocations reduced by the surgeon call for after treatment of the same kind as instituted for fracture, only that we begin exercise earlier.

Ankylosed joints are of two classes, mechanical and inflammatory. The mechanical is still the surgeon's problem. In the inflammatory it is necessary first to learn if it is extra or intra-articular. If within we may find veil-like deposits or bands of adhesions. The x-ray should be the guide, not only as a diagnostic procedure, but for a checking-up process, together with correct measurement of the excursion.

A stiff joint is not always due to adhesions but may be due to contracture of muscle. Here we find upon examination an evidence of tenderness, due to a fibrous exudate. Adhesions occur not only in joints but in soft tissue as well, and many cases yield readily to treatment. Heat is a great factor in stimulation and the galvanic current a destroyer of fibrinogen. Exercise and massage restore function.

Osteomyelitis. Chronic cases are always with the surgeon and owing to the lowered vitality, the poorly nourished cells have but little power to resist the infection. Copperionization, ultra-violet and massage will work wonders.

Tuberculosis of the bone will respond to the ultra-violet when all other helps fail. Tuberculosis of weight bearing joints demand different treatment from tuberculosis of other joints and bones. Changes of treatment are necessary, because the body becomes habituated to one and the same treatment but will still react to a new one. Surgical tuberculosis is recognized as only a part of a general infection and general treatment is indicated. For tubercular peritonitis the ultra-violet is receiving careful consideration in many of our eastern hospitals.

Rickets requires the same supportive treatment and the ultra-violet. The wonderful work done in the Children's Hospital in London only needs to be mentioned to make us sit up and take notice.

In paralysis the source must be determined first to ascertain whether it is cerebral, spinal or peripheral. The cerebral offers less than any of the other forms and yet by rest, massage and electrical stimulation we may help nature to make a more speedy recovery and at the same time let the patient feel that he is having something done for him, and it does not necessarily mean a life of invalidism.

In spinal paralysis due to mechanical means, we rely on the surgeon to remove the obstruction and assist him by keeping up the nutrition of the parts affected. Some wonderful results have been recorded following operation.

Hemorrhage of the cord calls for the same line of treatment together with a careful sifting out of the muscles affected and a stimulative treatment to them, while the antagonizing muscles call for sedative treatment.

In peripheral nerve paralysis the central tracts of the vaso-dilators and part of the constrictors are paralyzed, causing contraction of the vessels, which means a poor blood supply. Therefore, peripheral paralysis needs the same careful localization, and yet has more to offer than the other two. Remove the cause, prevent deformity by the proper application of braces, increase the nutrition of the part and restore function.

Infantile paralysis offers a great field. While nature is absorbing the clot we are keeping the parts well nourished. Prevent deformity by the proper application of splints, make the muscles strong by exercise, and when the impulse comes, we are ready to receive it, and function is restored. Here the condition for regeneration is more favorable than in traumatic, peripheral paralysis, because in the former both the peripheral and sympathetic non-medulated fibers are preserved completely and it is only a question of regeneration of the center.

It has been demonstrated that stretched muscles that have not functioned for ten or fifteen years may not be paralyzed but will react to a mild electrical stimulation and in course of time become restored.

Group muscles supplied by the same terminal nerve, and in which no one member is paralyzed completely, have been restored approximately to normal power. The technique of paralysis work is altogether different from other work and should be done only by skilled assistants. The absence of a proper brace, over-exercise, or weight bearing before time, will delay the progress for weeks. As soon as the muscle is found to be paralyzed, the proper brace should be applied. No treatment should be given for at least twelve days after the temperature has subsided and only of the mildest

form at that time. For a child the first step is to place it in a tub continuously at the proper temperature. Massage and exercise should come later. Men differ as to the length of time that results are obtained after the infection, probably owing to their experience, tenacity and ability to control the patient.

A rule to go by is that a muscle showing a reaction of as much as one-third of the corresponding healthy muscle is amenable to treatment. Later on nothing offers the opportunity of re-education or muscle training, as in infantile paralysis.

Sclerosis, paralysis agitans and tabes all figure in this line. I can show you a woman unable to feed herself for months who by re-education of muscle or muscle training is now able to do so and even can wash dishes. Another who was unable to walk without crutches now can step over obstacles, where it had been impossible to step over a door sill.

As to the treatment of ulcers we go on the theory that ulcers occur only in a region that has lost sensation and does not heal on account of the lowered regenerative capacity and is much benefited by physiotherapy. Those occurring after a nerve injury will not heal under any treatment until the nerve is restored.

Neuritis may depend on several causes, such as injury, pressure by scar tissue, the injection of alcohol, or some of the numerous serums on the market; exposure to cold, damp houses, damp work shops, overfatigue and the poisons of infectious diseases. The prognosis depends upon the removal of the cause, the duration and the adherence to treatment. Pain in the back, sacro-iliac and sciatica pains, the bugbear of the industrial man, call for careful x-ray of the spine and sacro-iliac joints for abnormalities of these parts. Some large corporations protect themselves by making an x-ray of the sacro-iliac, and if the abnormalities occur the man is not employed in that class of labor that has a tendency to predispose to that line of disease, thus saving themselves suits for liability and the paying of long terms of disability.

All focal infection must be eliminated whether occurring in bone, gland or tissue. Patients free from pain while at rest, aggravated by posture and exercise, are due to some irritation other than structural, and we look for the inflammatory type. Those responding the most promptly occur when the infection is peri-neural, those occurring interstitially or between the nerve bundles responding less quickly. One of the most misleading points in the treatment is not to apply the treatment over the seat of pain but at that part of the nerve tract from which these fibers come. Here again, our electrical current comes in as an aid in diagnosis; that is, the part irritated is at

first further irritated and the pain made worse by the passage of the current. Rest is also to be insisted upon. If the part is dependent, a sling or brace should be applied and no massage should be administered.

Sciatica and lumbago and other forms of myalgia yield readily to the heat of diathermy. Many men, believing all cases are due to a hypertenacity of the muscle, excited by the presence of toxins or other morbid processes, precede the electrical treatment by long bakes. Torticollis of the spasmodic type respond less readily.

We divide arthritis into atrophic and hypertrophic, the classification being made by the x-ray. The same law holds good here. Look for focal infection and if found remove the cause. Hypertrophic calls for a sedative treatment, potassium iodide by ionization, complete rest and heat. No one can cure arthritis deformans but one sometimes can arrest the progress of the disease and make the patient more comfortable.

Atrophic calls for a more stimulating treatment together with exercise and massage. Diathermy is the modality of selection on account of its great heat, which causes relaxation of the muscular spasm attendant upon these cases.

In neuro-cardio-asthenia as seen in the past infections of the influenza during the war, we were able to return better than sixty percent to duty when previously there had been almost one hundred percent disability. This is done by graduated exercise, education as to cause and the Scotch douche.

Simple goitres occurring in early life clear up under thyroid and K. I. by ionization. Adenomatous and exophthalmic goitres should be handed over to the internist and surgeon and the patient taught the importance of rest, close observation, and if so decided, operation. No massage should be given. There is no doubt that many simple goitres have been aggravated by the constant rubbing in or applying of ointment or liniment with the idea of reduction. Patients should be taught the danger of this method.

In neuro-psychiatry we have the method of choice. The mere fact that some special treatment is being given for a special case is a relief to the mind and acts as a tonic to help bear the patient up until nature has asserted herself again and made the mind clear. Many people who are in homes and asylums today would not be there if some such treatment could have been instituted. The tired office man, the overworked housewife and the precocious child or student would find relief and progress to a useful citizen.

The evidence of fatigue in muscle is broad and predisposes to psychosis and phobias, especially when pinned to that term known as constitutional inferiority. Hydrotherapy and massage are the outstanding treatment of choice.

Dementia præcox I believe incurable, but mental trouble of a præcox type clears up and accounts for the cases reported as cured from time to time.

I regard epilepsy, *grand mal*, in the same way, but *petit mal* often yields, and we are able thus to prevent a further progress of the disease before a regular cycle is established, after which I doubt but a few, if any, have received relief.

As the title of the paper is broad our field of usefulness is equally so. At no time do we seek to be known as a cure-all, neither do we wish to work alone and our success largely depends upon the teamwork, of the surgeon, internist (checked and assisted by the laboratory findings); together with the trained physiotherapist.

DISCUSSION

DR. D. R. ULMER (Terre Haute): We have been hearing a lot of talk the last few years about educating the public. Doctor West spoke of that in the House of Delegates, and Doctor Mayo referred to it, and it is mentioned in all the literature, but we are not doing very much. I feel that this should emanate from the universities. The younger doctors should be taught in this respect, and probably post-graduate work would help us out in this matter. As Doctor Mayo said last night, we have left this to be done by the osteopaths and chiropractors. But if we could have this put into the universities and some such line of work in the hospitals, it would help us out a great deal. As it is at the present, we are going along single-handed and leaving the cases for these other people to handle for us.

DR. W. W. CAREY (closing): I feel that we have a work that is best done in a hospital. The general practitioner as well as the specialist is too busy to give the time necessary for the results to be obtained.

At present I think we are the only hospital in the state giving our nurses this training. All our recent graduates are capable of carrying out any order for electrical, hydro, remedial exercise or massage that the physician may require.

That it is overrated sometimes I do not doubt, but we do not pose as a cure-all, neither do we wish to work alone. Our success depends largely upon the teamwork of the surgeon, general practitioner and trained physiotherapist.

THE FAVORABLE PROGNOSIS OF AURICULAR FIBRILLATION

In a group of thirty-seven patients with auricular fibrillation, whose cases are reported briefly by T. Homer Coffen, Portland, Ore. (*Journal A. M. A.*, Aug. 11, 1923), about three-fourths are ambulatory, while one-fourth have died. Half of the entire number are comfortable and able to carry on their daily activities without cardiac symptoms. Some of these have decreased reserve

on unusual effort. About one-fifth of the entire number have more marked limitation of cardiac reserve, and while ambulatory, are more or less incapacitated. Most of these have needed digitalis at one time or another, or have learned how to use it to safeguard the heart. The heart is able to adjust itself to auricular fibrillation, and to compensate as it does in valvular lesions. When both fibrillation and valvular lesions (or cardio-sclerosis) are present it may still compensate well for months or years, the prognosis depending on the sum total of symptoms and signs which indicate cardiac function. Evidences of myocardial weakness are largely clinical, but changes in the Q-R-S-T complexes, in repeated electrocardiograms, aid in measuring the progress of degenerative changes.

THE VALUE OF FORCING FLUID IN THE TREATMENT OF MERCURIC CHLORID POISONING

Having determined that 15 mg. of mercuric chlorid per kilogram of weight was the fatal dose for dogs, Charles C. Haskell, J. R. Carder and K. S. Coffindaffer, Richmond, Va. (*Journal A. M. A.*, Aug. 11, 1923), attempted to ascertain whether dogs could be saved after this dose. The mercury was given to the treated dogs in the same manner as to the controls. After allowing from thirty minutes to a little more than two hours to elapse, they gave the dogs an injection, into the jugular vein, of 25 c.c. of an 0.8 percent saline solution per kilogram of body weight; this was followed by injection of a similar amount either subcutaneously or intraperitoneally. The animals were kept in metabolism cages, and intraperitoneal injection of 50 c.c. of salt solution per kilogram of body weight was repeated daily for varying lengths of time, until death or apparent recovery. If the dog was in good condition after one month, it was considered as having "survived". It was evident that a definitely favorable influence is exerted by the use of large amounts of physiologic sodium chlorid solution in dogs poisoned by mercuric chlorid. Thus, of the twenty-five dogs receiving the fatal dose of 20 mg. of mercuric chlorid per kilogram of body weight, and subsequently treated by intravenous, subcutaneous and intraperitoneal injections of large amounts of saline solution, twenty survived. So far as experiments justify conclusions, it seems permissible to the authors to state that the intravenous injection of salt solutions comparatively soon after oral ingestion of mercuric chlorid possesses a definitely beneficial action and effects the recovery of animals that have received what is probably the surely fatal dose for untreated dogs.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.
Editor and Manager

Office of Publication, 406 W. Berry St., Ft. Wayne, Ind.

OCTOBER, 1923

EDITORIALS

INDICATIONS AND CONTRAINDICATIONS FOR TONSILLECTOMY

If we are to judge from the number of tonsil operations that are performed in every community, proportioned to its size, we naturally would think that every person and especially every child is doomed to be subjected to tonsillectomy. As a matter of fact, some of the most trustworthy clinicians, and especially some of the leaders in laryngological work, find definite indications and contraindications for tonsillectomy, and every physician, particularly every physician in general practice who in the vast majority of instances is called upon to offer advice as to whether tonsillectomy is indicated or not, should be guided by the opinion of those who have given the subject the most careful consideration and analysis.

Sluder, recognized as an author and teacher, and the advocate of an operation commonly termed the "Sluder" operation, has just published a book on tonsillectomy in which is discussed in a very practical way the indications and contraindications for tonsillectomy, together with the results following such an operation when properly performed. In his judgment hypertrophied tonsils that obstruct breathing offer clearly evident reason for tonsillectomy, and the prognosis obviously is 100 percent. Likewise tonsils that are the seat of recurrent suppurative (follicular) tonsillitis should be enucleated, the prognosis being excellent, as the removal of the tonsils will be found to prevent the tonsillitis almost uniformly. However, attention is called to the part played by the lingual tonsil in the attacks. The patient probably will continue to have sore throats in the form of a follicular lingual tonsillitis, but these attacks are less frequent and not so hard on the patient as the attacks of faucial tonsillitis.

In the recurrent general sore throat, characterized by pain, general redness, with sometimes a little swelling which involves a wider area than the tonsil region, and often involving the larynx, nasopharynx, and nose, in which the tonsil takes no more part than does the surrounding tissue, tonsillectomy rarely benefits, and tonsillectomy for the relief of these attacks is usually a disappointment for both the patient and the surgeon. Some physicians are so extravagant in their praise for tonsillectomy that they claim it will help all

sore throats, whereas it is a matter of observation of those of large clinical experience that such is not the case.

We are of the opinion that much benefit almost uniformly is obtained by tonsillectomy in cases of large lymphatic glands in the anterior triangle of the neck. The lymphatic gland that is supplied directly from the tonsil lies at the anterior margin of the sternocleidoid muscle on a line with the body of the mandible. From this gland others are supplied, extending downward, being relayed three or four times, finally reaching the apex of the pleura. This rather indirect anatomical connection accounts for the theory that the tonsils may be the point of entry for infectious diseases and especially tuberculosis. In fact, it is given as the explanation of the frequency of apical lesions of the lungs. At all events an infection of cervical lymphatics is very apt to come from the tonsils, and Sluder states that in his experience these glands become smaller or normal after tonsillectomy, with increase of appetite, strength and weight. This follows oftentimes even though the tonsils by inspection were negative. Usually, however, there are indications of chronic tonsillitis.

Some writers have recommended tonsillectomy as part of the treatment for chorea, but in Sluder's extensive experience he has not seen any improvement which could be attributed to tonsillectomy, and in those cases that were improved, tonsillectomy was indicated for other reasons which probably were accountable for the benefit derived.

In discussing the indications for tonsillectomy, Sluder very pertinently remarks that an attack of acute tonsillitis may be most mischievous or pernicious as the forerunner of many other diseases such as rheumatic fever, endocarditis, serious or fatal infection of the lymphatic glands of the neck, middle ear infections with their fatal possibilities, quinsy, acute nephritis, pyelitis, and probably many more in which the causal relation is less clearly discernible at present. When the tonsils give definite indication for removal, the prognosis is as good as in most other departments of surgery. On the other hand, the removal of tonsils without justifiable indications oftentimes leads to disappointment. This is particularly the case in children, rather than adults in whom the functional activity of the tonsil is a thing of the past.

An interesting discussion which even at present commands the attention of physicians is the relationship between goiter and focal infections in the tonsils. Extensive inquiry among a large number of men who have given this problem careful study brings about the conclusions that while goiter is believed to be of toxic origin, and the tonsil may be the focus of infection, yet it is not more likely to be the cause of the goiter than infection in any other location, such as in the sinuses, teeth, or gall-bladder. Sluder says that

it is his experience that thyroid gland disturbances are very frequently secondary to throat infections, but it is his opinion that the lingual rather than the faucial tonsil is more apt to be the causative factor. He even goes so far as to say that faucial tonsillectomy for goiter has been disappointing.

Much has been written lately concerning x-ray or radium treatment for enlarged tonsils. In this connection it should be noted that the anatomical structure of the tonsil cannot be changed by such treatment. In problems that involve the infection of tonsils it would seem that tonsillectomy should be the choice despite the fact that x-ray and radium may reduce their size and sterilize them temporarily. Tonsillectomy for recurrent acute follicular tonsillitis is one of our most satisfactory procedures. However, it is obvious that where tonsillectomy is contraindicated, the laryngologist will welcome the use of the x-ray or radium.

There are a few definite contraindications for tonsillectomy and obviously the first one is hemophilia. Status lymphaticus is another contraindication, though the large thymus may be treated by x-ray, and when it has been absorbed the case may be operated. Furthermore, the patient's general condition may be such that all surgical procedures are contraindicated save those that are immediately necessary to save life. Diabetes comes into this class. Diabetics may, however, be operated when the urine has become free from sugar and acetone, but they should remain under the observation of a competent internist throughout.

We can dismiss the question of loss of function as a contraindication to tonsillectomy, for the reason that any possible function possessed by the tonsil will be cared for by the remaining lymphoid tissue in the throat, and the compensatory action is quite sufficient. Occasionally the recommendation is made that tonsillectomy may be performed in the presence of an acute sore throat, but such advice is pernicious and should not be followed, as the results are very apt to prove unfortunate. Hypertension is not a contraindication for tonsillectomy if blood clotting is normal, and this is borne out by the experience of all operators who have done tonsillectomy regardless of hypertension.

A point of considerable discussion is the effect of tonsillectomy upon the singing voice, and Sluder very fairly presents the matter in this way: "Many persons desirous of singing often think they can sing and are encouraged in this belief by family and teachers. As they continue their efforts and lessons it is found that their throats do not stand the work. They sometimes then consult a laryngologist. Should he remove the tonsils under these conditions, he will find that his surgery is often unjustly blamed for the loss of that voice, but with real disease of the tonsils in

real singers, the prognosis for tonsillectomy is as good as for other patients." This opinion is corroborated by the opinion of other experienced laryngologists.

In summarizing the whole subject it may be said that while the indications for tonsillectomy may vary in different individuals, yet on the whole there are few contraindications. Most of the bad results can be attributed to bad surgery, for there are few instances where a properly performed tonsillectomy of itself alone has produced bad results, although unquestionably there are many cases in which tonsillectomy has been disappointing because results were expected that required the removal of symptoms or conditions for which the tonsils could not be held responsible.

THE TERRE HAUTE SESSION

In many respects the 1923 session of the Indiana State Medical Association, held in Terre Haute, September 26 to 28, inclusive, was one of the best sessions ever held. The arrangements for all of the meetings were very satisfactory and reflected credit upon the committee on arrangements. The rooms where the various meetings were held were reasonably quiet, a factor worthy of consideration in these days when there is so much noise on the streets due to clattering wagons, honking automobiles, and the screeching of city or interurban cars many of which are trying to run on flat wheels or wheels that for a long time have been unacquainted with grease. The local medical profession of Terre Haute extended a "glad hand" to all of the visitors and furnished a brand of hospitality and entertainment that has never been surpassed and seldom equaled. Free garage facilities were provided for those attending the session, and not content with that, the privilege was sought and obtained for street parking without limitations. In fact, every doctor who went to Terre Haute in an automobile was given a sticker for his car which read "Park where you please and as long as you please except in front of theatre or fire plug". Even the traffic policemen greeted the visitors with a smile and forgot the ordinary traffic rules by permitting right and left turns when such were forbidden to the regular automobilists. There were plenty of hotel accommodations, and the local committee had provided an abundance of good accommodations outside for those who could not be or did not desire to be housed in hotels. The smoker was enjoyed by all and was attended by the largest number of people ever congregated at an Association smoker. Music, vaudeville stunts and refreshments were sufficient to satisfy the guests. The visiting ladies were not slighted, for they too came in for an abundance of entertainment in the way of automobile rides, luncheons and theater parties.

It was remarked by many that the papers and

discussions were excellent and of very practical value. A number of noted men from outside of the state took part in the program, and among these were W. L. Clark, of Philadelphia, who presented a lantern slide paper on "The Treatment of Neoplastic Diseases by Combined Methods;" V. P. Blair, of St. Louis, also presented a lantern illustrated paper on "Various Kinds of Face Deformities Helped by Operation;" John Lovett Morse, of Boston, presented a paper on "Physical Examination of Infants and Children;" Clyde L. Cummer, of Cleveland, presented a paper on "Secondary Anemia—Important Possibilities to Be Considered in Making Differential Diagnosis;" and E. McGinnis, of Chicago, presented a paper on "Conservative Ethmoidal Surgery." Another interesting feature was a lantern slide talk on South American hospitals by F. W. Foxworthy, of Indianapolis. All of the sections were well attended, and aside from Indiana doctors there was a large attendance from Illinois, it being reported that there were over two hundred from that state, which, added to over six hundred of our own State Medical Association who registered, made a total attendance of approximately nine hundred. The commercial exhibits were on a plane with the exhibits of former sessions, with all of the newest instruments, books and pharmaceutical specialties on exhibition. President Good was an excellent presiding officer and, in fact, throughout the year has proved himself to be an energetic worker in the betterment of the welfare of the Association.

The business activities of the Association were cared for by the Council, and the House of Delegates. The latter body put in force some important features which it is hoped will add to the benefits provided by the Association. In the first place, provision was made for the creation of an educational department with a view to making the public better acquainted with what the medical profession is trying to do in promoting better health. An appropriation of seven thousand dollars was made for this purpose. In order to meet the growing expenses of the Association the dues were raised from five dollars to seven dollars per year, to take effect at once. The plan to secure cheaper automobile insurance for the members of the Association was adopted and in the near future the members will have the opportunity of securing policies at rates much less than ordinarily paid. The Association also went on record as favoring a fifth year or hospital internship as a requisite of all graduates of medicine before being licensed to practice medicine in Indiana. Action also was taken tending to separate the sheep from the goats, so to speak, by using the M.D. degree in preference to the prefix Dr. which is employed by every chiropractor, muscle stretcher, bone manipulator, corn parer, or other tinkers with health and its abnormalities who use or encourage the prefix "Dr." to their names. Another im-

portant step was the rejuvenation of the committee on civic and industrial relations by calling upon that committee to look after the interests of individual members of the Association during controversies with life insurance companies, compensation boards, etc., and provision was made to pay the committee's expenses and ten dollars a day honorarium for each member when performing such duties. The selection of Dr. S. E. Earp as president met with universal approval, and it is but natural that the Association should go to Indianapolis for the next session as it has been the policy to go there about every third year on account of its central location.

In all, the Terre Haute session was a success and those who were not there missed a profitable session.

DUES ARE RAISED

At the Terre Haute session the dues of the Indiana State Medical Association were made seven dollars for the year 1924. This increase in the dues was made necessary on account of the adoption of a plan whereby the public is to be educated as to what the medical profession has done and is doing for the benefit of humanity. As a part of this education there will be information given to the public as to the consistency and advisability of maintaining a high educational standard of fitness for those who seek to practice the healing art. Two dollars more per year from every member of the Association means nothing in the way of a hardship to the members, for as we have pointed out before in discussing the merits of taxation by our Association, "there isn't a doctor in the state who every week doesn't waste more money in frivolity or unnecessary expenditures than in a whole year is paid out in dues to the State Medical Association. Think of the money that probably half of the membership of the Association pays out in dues to golf associations, or for other luxuries of one kind or another. The trouble of it is we have gotten so stingy, and we have disregarded our own welfare so much and so long that we howl until we are black in the face if asked for a dollar for a medical society that returns the value to us a thousand fold. On the other hand we smile and jump at the chance to pass out money to a country club, an organization to promote the gentle art of poker playing, or a society to provide the best brand of entertainment of one kind or another. The truth of the matter is we ought to be ashamed of ourselves for having been niggardly so long, and for having served as a stumbling block to the progress of many things directly or indirectly connected with our own advancement as medical men. We may not chortle as gleefully as the chiropractors when they hand out twenty-five or fifty dollars per year for their cults, but at least let us gratefully accept the raise in dues and show that we

are in sympathy with all that the Association is trying to do by paying in our seven dollars per year on or before the first of the year.

COLLECT YOUR OWN ACCOUNTS

Collection agencies are very busy these days trying to secure contracts with physicians to make collection of bad accounts. It would be well for every doctor to investigate most thoroughly the reputation and claims of all collection agencies. Most of them are responsible but few of them are worth anything when it comes to effecting collection of bad accounts, and those who do accomplish anything usually want for their services altogether too large a slice out of the money collected. They get along famously in collecting the accounts that the doctor could collect himself if he put forth any kind of effort. The trouble with most doctors is that if they send one or two belated statements to their patients and do not receive payment, they are ready to turn the account over to the collection agency that makes the settlement very promptly and gets credit for something that could just as well have been done by the doctor himself and probably without incurring any displeasure on the part of the patron. When it comes down to the real bad account, most collection agencies fall down on the job. They know that they can get enough easy accounts to keep up a semblance of a reputation for rendering services and that is about all that they expect to do. If a doctor is wise he will adopt a system of presenting bills on the first of every month and carrying out a follow-up system with slow-pay patients until the account is collected. If pressure is needed he can exert it as well as a collection agency, and seldom will a collection agency get settlement of an account in which the doctor has failed if he puts forth any kind of an effort to accomplish results.

LET'S PUSH "HYGEIA"

While we are talking about this plan of educating the public, and the Indiana State Medical Association has just made an appropriation of seven thousand dollars for the purpose, permit us to call attention to one of the best aids in this work that could be developed, and that is the publication by the American Medical Association of the journal called *Hygeia*. It is a wonderful health journal, and it is so trustworthy and authoritative in the information that is given that every person in the country who desires to know something more about how to live and how to keep well should read it. There are hundreds of thousands of people in the United States who up to this time have never heard of *Hygeia*, and they may never hear of it if the regular medical profession of the country does not take the time and the trouble to make the

public acquainted with it and the wonderful work that it is doing for the betterment of human health and happiness. It would be a disgrace for the medical profession if a publication like *Hygeia* should be permitted to die, or to exist as an enterprise that has feeble support from those who do need it. Every doctor in Indiana ought to consider it a duty to encourage every one of his patients to subscribe for and read *Hygeia*. A copy of that journal should be on the table in the waiting room of every doctor, and patients should be reminded that it is a journal worthy of their perusal. Let us get behind *Hygeia* here in Indiana and make it a howling success so far as this state is concerned. Who is going to be the first doctor to sell from ten to twenty-five subscriptions for *Hygeia* among his patients?

SOCIETY SHOULD PROTECT ITSELF FROM OBSTRUCTIONISTS

THE Citizens Medical Reference Bureau, with offices at 145 West 45th Street, New York City, and giving H. B. Anderson as its secretary, publishes news letters and bulletins in support of the contention that medical examinations, vaccination, serum or other treatment should not be made compulsory. It is sponsor for considerable other agitation directly opposed to medical men and medical practice. This, of course, would do away with any protection that is offered the public through the established fact that certain protective treatment is of value to the public as well as the individual.

Society has a right to protect itself from the individual's condition or acts when it is conclusively shown that to do otherwise spells disaster. Thus the insane are locked up and the person infected with the smallpox is quarantined. If vaccination acts as a protection against smallpox, typhoid and diphtheria, hasn't society the right to say that vaccination should be employed by every individual who comes in contact with society and who may as a result of contracting the disease be a menace to society? And if any individual elects not to take advantage of these protective measures hasn't society the right to protect itself by excluding that individual from coming in contact with those who may be harmed by such contact?

Really all of these various "anti" societies, opposed to all rational progress, and defying all of the rules established through scientific advancement, are based upon the assumption that the opinion of a few is worth more than the opinion of many, and it will be noticed that the adherents to the faith of these "anti" organizations have more or less warped ideas as to consistency of thought and action. It is fortunate that their ideas do not always prevail, though perhaps it is just as well that we have the leavening influence of their opposition. The worst feature about

their arguments is that they garble statements and they misinterpret and misrepresent findings. This is evidenced by the discussion concerning the value of inoculation for typhoid in which the beneficial effects of typhoid vaccination of soldiers during the World War are discredited and an attempt is made to show that vaccination stirs up latent tuberculosis and causes heart troubles. Vaccination for smallpox also comes in for severe condemnation and refusal to accept the theory that it offers any preventive features. The latest discovery to merit their attacks is diphtheria vaccination, which comes in for condemnation on the ground that statistics show that diphtheria along with smallpox is declining not only in the number of cases produced but in the severity of the infection. Absolutely no credit is due to vaccination for the lessening in the number of cases of either of these diseases.

These misguided obstructionists have a right to their opinions, but it would be just as well for the medical profession and public health officers to offset the vicious propaganda that is poisoning the minds of the people concerning the beneficial effects of measures the value of which has been proven beyond the question of a doubt.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

Toxin antitoxin should do for diphtheria what vaccination has done for smallpox. In most cases it confers immunity for at least several years and possibly for life. All young children should be immunized, for they are all susceptible to diphtheria. Why not spread the gospel to every family having children?

We still hear about the scarcity of physicians in rural districts. Good men will not go into country practice unless they are assured of a fair livelihood without undue hardships. The problem can best be met by the guarantee of income by the citizens of the community. When that occurs good men will go to rural communities.

AGAIN we wish to urge upon committees the necessity of giving attention to the duties of

office. It is altogether too common to note inactivity, apathy and indifference on the part of medical society committees, and we hope that the coming year will bring forth some real constructive work on the part of the committees that are appointed to serve the Association.

A CERTAIN lawyer was charged \$250 by a surgeon for operation and after-care in a case of ruptured appendiceal abscess. Some time later the surgeon was charged \$1,000 by the lawyer for drawing a will, and when the surgeon objected to the size of the bill the lawyer replied, "Doc, you stung me when I employed you to operate me and I thought turn about was fair play." Consistency is a jewel.

ALONG with roller coasters, dance halls, side shows, "hot dogs" and other amusement features which go with popular resorts, Coney Island is now to have the advantages of a seaside clinic that is to be operated under the direction of the Commissioner of Health. Two physicians and four nurses are in charge of the work which is expected to be heavy along the line of public health education in preventive measures and first aid.

THE Robert W. Long Hospital constantly has a long waiting list of people who have made bona-fide applications for acceptance as patients. Fully 90 percent of the total number of patients in the public wards are reported as charity patients. Practically all of the counties in the state are represented among the patients one or more times throughout the year. In view of the long waiting list there ought to be some provision for making the entire hospital a charity hospital.

THE retiring president of the Indiana State Medical Association, Dr. Charles H. Good, of Huntington, certainly proved himself "a live wire" and throughout his tenure of office he showed in many ways not only his interest in the advancement of everything pertaining to the welfare of the medical profession, but that he was willing to put forth time, effort and money in an endeavor to accomplish the best results. We need such energetic and right thinking men in responsible positions in all of our medical societies.

SOCIAL service is deserving of serious consideration. It should not be attempted or carried out except in a systematic and careful manner. Those in charge of the services should make thorough investigations and distinguish between the needy poor and those able to pay. The medical profession should realize that it is equally responsible for pauperization. There should be supervision of the services of the physician by some

responsible body like the county medical society. Patients who are able to pay should not be cared for gratuitously.

INDIANA physicians will be interested in knowing that a monument to the late Dr. Frank B. Wynn has been built on the top of Mount Wilbur, in Glacier National Park. Two years ago Dr. Wynn, nationally known mountain climber, lost his life while climbing Mount Siveh. He had made unsuccessful attempts to climb Mount Wilbur, 9,293 feet high, which recently was mounted for the first time by Norman Clyde, of California, and who remained on the summit for several hours in order to build the monument to Dr. Wynn. The monument is plainly visible through binoculars.

THE system of protecting children against diphtheria is recognized by the results secured in progressive communities where toxin-antitoxin is given as a preventive. Health officers, teachers and parents should unite in an effort to make our schools free from diphtheria. In fact, it is possible to wipe out diphtheria altogether if we can secure the cooperation of everyone who has to do with the care of children. The day is coming when diphtheria will be as rare in communities where toxin-antitoxin is administered as a routine measure to children as smallpox is rare in those communities where vaccination is practiced universally.

AT the Terre Haute session a motion prevailed in the House of Delegates to the effect that members of the Association should use the "M.D." after their names in preference to the common prefix of "Dr." which now is used by corn parers, chiropractors and various other adjusters or manipulators who attempt to treat human ills and not only pose as doctors but puff up like poisoned pups when anyone calls them "Doctor". We believe that the suggestion is a good one. The M.D. degree ought to mean something, and it is perfectly legitimate to adopt every method that is in good taste to let the public know that we do have the M.D. and possess the qualifications that the degree guarantees.

MUCH has been done to lower the standards of medicine. In our educational propaganda it would be well for the public to understand that if the standards of medicine are lowered through the loss of impetus and initiative in the young physician, the public will be the chief sufferer. Concerning the chiropractic situation, an influential lay paper, the *New York World*, says that in the interests of the public the chiropractors should be educated, and that the chiropractic treatment should be employed only by men who know what they are doing and why. In concluding, the statement is made that "given education it is

probable that most of these spine adjusters would cease to be chiropractors".

ARTHUR BRISBANE, who furnishes copy for an everyday column in a large number of syndicated papers and who is a self-appointed oracle and adviser, takes a fling at doctors by insinuating that most of them crowd food into a man fighting a high temperature. His personal physician should have a heart-to-heart talk with him, and disabuse his mind of the idea that what a few men may do is not the rule or practice of the majority. He very pertinently remarks that the body cannot eliminate poisons and assimilate nourishment at the same time. No doubt his preachments are read by thousands of people every day, and trustworthy health suggestions will accomplish great good, but why take a fling at the doctors?

DR. CHARLES A. L. REED, of Cincinnati, a well-known surgeon, and ex-president of the American Medical Association, has decided to give up the practice of medicine and devote himself to the broader activities of a publicist, and he announces that in such capacity he is going to give active support to the declared policy of the American Medical Association to carry health instruction to the public. He has started his new career by preparing a series of articles on health problems that are now appearing simultaneously in daily newspapers in all of the chief cities and many smaller cities of the United States. Dr. Reed has an unusual gift in writing clearly, concisely and entertainingly on medical subjects, and he ought to be eminently successful in his new venture.

THIS season of the year brings renewed activity in medical society work. Nearly all of the large societies which are more or less international in character are doing post-graduate work or what is known as instruction programs. These courses are well attended. One of the meetings that will interest the Indiana profession is that of the Tri-State District Medical Association, to be held at Des Moines, Iowa, on October 29 to November 1, inclusive, and the program is a distinctly post-graduate program with leaders in the profession from all over the United States as instructors. We already have published the program in an early number of *THE JOURNAL*. What is being done in the larger medical societies can and should be done in the smaller ones and particularly the district medical societies. The suggestion is offered to those who are getting up programs for the coming year.

WE have received a reprint of a discussion pertaining to testicular grafting by Dr. Serge Voronoff of Paris in which he states that after considerable experience (favorable) he now employs

for grafting only adult chimpanzees and cynocephalic monkeys whose puberty and virility are unmistakably evident. He maintains that glands thus provided will surely continue their function in the human organism. What a boon for the decrepit old codgers who are searching for the fountain of youth! But monkeys and chimpanzees are not found on every sassafras tree and the supply is not likely to meet the demand. Furthermore, are we destined to see a lot of monkey-faced progeny with a propensity to hang by their tails to the limbs of our trees in our parks? Fine outlook for us if those testicular grafters (and grafters probably is a good name) succeed in giving monkey youth to some of our numerous sexual corpses.

THE Terre Haute medical men have set an example of prodigal hospitality that it will be hard to beat. At the last session of the Association the guests were given not only a cordial greeting, but furnished with features of hospitality to which we are not accustomed. Who ever heard of free automobile service and free garage service? Even the Terre Haute police greeted the doctors with a smile and said "Go as far as you like", and they proceeded to sanction pasters on the doctors' automobiles which said "Park where you please and as long as you please, except in front of theatre or fire plug". Some doctors even said that they were furnished free booze, but we don't believe it. We never got a smell! We do know that on every hand there were Terre Haute doctors to see that the visitors had everything necessary to add to the comfort and pleasure of their visit. Even the visiting ladies were loud in their praise of the hospitality extended, and it is some job to entertain women at a medical convention!

IN this number of THE JOURNAL we print a letter from a well-known Indiana surgeon, a veteran of the late war, who very justly complains about the procrastination and inefficiency in giving our ex-soldiers the attention that they deserve as the result of disability incurred in service. He also complains concerning the dangers threatened as a direct result of making the work of the Veterans' Bureau more or less of a political football. No doubt much could be added to what has been said concerning the bad management of the Veterans' Bureau, and it is hoped that congressional investigation (already ordered) will accomplish something in the way of exposing the evils and later correcting them. However, there always will be inefficiency when position depends upon political preferment or pull from some organization, and when ability and quality of service is not given consideration. The bureaucratic control of everything pertaining to the care of those incapacitated in the late war is bad enough

without adding to it the incompetency which invariably accompanies a spoils system.

MANY old men and not a few old women, like Ponce de Leon, are searching for the Fountain of Youth, and since the newspapers have had so much to say concerning rejuvenation, particularly by the Steinach method, hopes have been raised, and the quacks and charlatans have taken on new life and action in their endeavor to accumulate dollars from those easily duped. There is nothing so attractive as the promise to restore youth, and the amount that can be squeezed out of an old codger who wishes to be young and frisky again depends upon nothing except the size of his pocketbook. Now comes the *Journal of the A. M. A.* (August 11, 1923) in an editorial in which it is stated that Steinach's method of rejuvenation, stripped of all by-products, is simply vasectomy, an operation that has been found worthless in restoring youthful vigor, and the editorial concludes with this "blasting hope" type of information: "Certainly there is not as yet any actual proof that rejuvenation has been accomplished in a single individual case, or any basis for the belief that it ever will be accomplished."

Now is a good time to invest savings, as all securities are lower than they have been for some time. However, it is a good time to get "stung", for there is a great temptation to buy things that promise large returns but have little to back up the promises. There are plenty of sound investments amply protected which at present rates offer a good return, and the doctor who has any money to invest will be wise if he consults a conservative banker before considering any of the numerous investment offerings that are placed before him. The trouble with the average doctor is that he isn't satisfied with the income from any number of safe investments that are staring him in the face right in his immediate community, but he likes to flirt with speculative investments which once in a while turn out all right but more often leave him poorer but wiser. Generally speaking, the investment that offers big returns is a poor one to start with or big returns would not be promised. The more secure the investment is as to principal the more apt it is to give a moderate return, but the investor will have the satisfaction of knowing that his principal is safe.

AT the recent session of our State Association we heard some comment about the inadvisability of the piling up of a reserve in the treasury of the Association. It reminds us of the boy who is given a quarter and can't run fast enough to the first store where he spends it. Well, we have arranged to spend some of our surplus, and it is in a good cause, but we will be wise if we

refrain from spending all we have in the treasury. A little surplus is a good thing.

We sometimes hear that the A. M. A. is creating too large a surplus, but as a matter of fact the A. M. A. has inaugurated several features that are of the utmost importance to the medical profession or the public, in carrying out the ideals of the medical profession, and it is quite possible that these enterprises may not be self supporting, or that they may require elaboration, in which case a little surplus will be found of distinct advantage. In reality, instead of reducing our dues in the A. M. A. or in our State Association, in both of which it has been proposed as the direct result of the knowledge that there is a little surplus, we ought to raise the dues and broaden the scope of action of these organizations.

THE United States Public Health Service is attempting to stimulate action on the part of the medical school inspectors in warning mothers that six-year molars should not be pulled out or destroyed for they never are replaced by other teeth. Examiners also are urged to advise mothers that they should be very sure that the child is taken to a *real* dentist. This is good advice, but a lot of doctors who are called upon to treat undernourished and sickly children will do well if they too will look in the mouth and see if there are not a few badly decayed teeth that should have the attention of a dentist. Rot in teeth spreads like rot in a barrel of apples, and decayed teeth not only indicates bad feeding for the child, and living under bad hygienic conditions generally, but it means a variety of disturbances due solely and alone to the infected mouth. Some parents have an idea that children should not visit a dentist, and not infrequently the remark is made that dentists are for middle-aged and old adults. Parents should have it drilled into them that children ought to go to a dentist as well as to a doctor, and both ought to be visited periodically for examination and such advice as may seem indicated in order to protect health.

WE are pleased to note that at least some effort is being made to offset the vicious teaching of one W. H. Bates, M.D., who for several years has been flooding the public with advertising matter of one kind or another, in which people are told to "throw away your glasses". We all know that the Hearst publications are more or less sensational, and in fact it is entirely probable that it is the sensational in the Hearst periodicals that gives them their circulation. At all events, *Hearst's International* has published an article by Bates in which he claims to have perfected a system of training for the eyes which will enable anyone to dispense with glasses. Now comes *Hygeia* for October, recognized as giving to the public authoritative information on all topics pertaining to theory and practice of medicine, in

which the Bates theories and teachings are exploded and openly denounced as being not only absurd but vicious teaching in that many people might suffer serious harm if they are led to believe in the Bates theory and follow out his method. In reality, the Bates method of placing the eye in a condition where it does not require glasses should be considered a humbug, and one that is foisted upon the public purely and alone for pecuniary gain.

THERE are a few misguided members of our Indiana State Medical Association who seek "business" by blatantly advertising that they are using the Abrams treatment. Evidently it does not mean much to have the Abrams treatment pronounced a palpable fraud by those who have investigated the treatment in an impartial manner. The Milwaukee Medical Society passed a motion to the effect that the entire Abrams method is such a palpable fraud that the society considered it beneath its dignity to appoint a committee to investigate it, and that the pursuit of the Abrams method on the part of any member of the society should be considered inconsistent with membership in the society. A county medical society in Kentucky expelled two of its members for practicing the Abrams method, which publicly was branded as a fraud, and a county medical society in Oklahoma did the same thing. The Massachusetts Medical Society called for the resignation of one of its members who was a follower of Abrams, and subsequently the same individual had his license to practice medicine revoked by the Massachusetts Board of Registration in Medicine on the charge that he was guilty of deceit, malpractice and gross misconduct in the practice of his profession in that he had treated a young man by the so-called Abrams method.

A reprint on the Abrams vagaries has been published by the *Journal of the A. M. A.*, and will be sent to interested parties on the receipt of four cents in stamps. In view of all of this activity in showing the fraudulent character of the Abrams treatment, why should any self-respecting physician become a follower of Abrams?

No doubt many of our readers have heard of Dr. L. D. Rogers, who claims to have originated what he calls auto-hemic therapy, and he advertises himself to be the editor of a magazine known as the *Pan Therapist*, a periodical that is devoted to the so-called auto-hemic therapy. He also seems to be the originator of what he calls the Auto-Hemic Therapy Foundation, an institution incorporated, it is announced, "not for pecuniary profit but developed in particular to disseminate knowledge pertaining to auto-hemic therapy and allied subjects". We notice that most of these discoverers of new theories or new forms of treatment for which exaggerated and unfounded claims are made have an eye to business. This is evidenced

by circulars calling attention to the subscription price of the *Pan Therapist*, and the courses in auto-hemic therapy of not less than fifty hours for which until recently a charge of five hundred dollars was made to each student, but which is offered to those making up a class at the "unprecedented reduction of twenty-five percent—making the tuition for each member \$375." Oh, well, a sucker is born every minute, and we know that some of them are medical or pseudo-medical suckers, so why worry? If it isn't Abrams and his fraud it might as well be Rogers and his delusive theories and practices, a knowledge of which imparted in fifty hours of instruction is reluctantly given at \$375 per student by the discoverer, who likes to impress those who bite at the bait that he is not divulging his secrets for pecuniary profit. In fact, we are under the impression that perhaps Abrams has a rival in Rogers, and it would be well for the gay California deceiver to look out for his laurels.

At the present time there is no excuse for anyone being out of work, and with salaries and wages what they are it is inconsistent to include a large number of working people in the list of those who should have gratuitous medical and surgical services at the hands of charitable doctors and the clinics of health boards, school boards, Red Cross, or any of the welfare organizations. It not only is an injustice to continue to treat self-respecting and self-sustaining people free of all charges, but it helps to produce a dependent class. We note that there is a tendency to expand the endeavors of these various clinics, and we cannot help feeling, as expressed by a prominent doctor, that those in control are doing this largely to make themselves secure and indispensable and all at the expense of the doctor. It really is amusing to what extent the house-to-house canvass by so-called health officers or representatives of health organizations is being carried with the idea of recruiting the clinics or adding to the sum total of work done by charitably disposed physicians. We do not object to the efforts to improve the health and living conditions of the people, but we do object to the method by which it is sought to accomplish it in many localities. The way in which these self-constituted canvassers in the interests of better health glibly talk about securing the gratuitous services of "the very best physicians and specialists" for a lot of people amply able to pay something for the attention given them would be laughable if it were not so serious in its ultimate effect in helping to pauperize the people. Isn't it about time for the medical profession to analyze the situation and unanimously adopt such measures as seem indicated to curb a tendency that is dangerous to the body politic?

MUCH has been said concerning the effect of tobacco on the human economy but, in reality, there is little data upon which scientific conclusions may be based. In some individuals tobacco acts as a sedative. It quiets the nerves and lowers the blood pressure, whereas in others it acts as an excitant and raises the blood pressure. Thus, in a series of tests carried on in the psychological laboratory of the Johns Hopkins University, it was found that the use of tobacco produces a rise in the systolic and diastolic blood pressure, and in the heart rate, but, as the observer notes, "the normal irregular variations in blood pressure due to various causes are practically as great as the variations which may be ascribed to tobacco".

Many individuals learn by experience that the use of tobacco is deleterious and they reluctantly give up tobacco because they have proven conclusively to their own satisfaction that the tobacco habit is injurious. It may be that tobacco, like many other things, is injurious to some and harmless to others, but in the absence of more definite scientific conclusions than we have at present, it seems reasonable to suppose that when used in moderation, tobacco is relatively harmless for the large proportion of people who use it. The greatest trouble encountered is in determining what constitutes moderation, and in all probability many a person who claims to use tobacco in moderation really is using it to excess, oftentimes unconsciously. Certainly no one can claim that tobacco is beneficial, or that it offers anything more than food to satisfy a habit, and, besides, in case of doubt the interdicting of tobacco in the treatment of illness of any description is justifiable, even though the interdiction is a mere empiric prescription.

CALIFORNIA has been the battle ground for the legal recognition of various pseudo-medical cults and the acceptance of various forms of socialized medicine. The regular medical profession of that state has awakened to the situation, but has been a little late in recognizing the dangers that threaten. It will take a long time to offset the ill effects of many movements that might have been checked had they received appropriate attention in their infancy. At present it is necessary for the medical profession to fight for its very existence. It will win out in the end, but sometimes the lane is long before coming to a turn.

Concerning the position of the medical profession on the Sheppard-Towner law, it is pointed out that an actual survey shows that the physicians of California give an average of one-third of their time to service for which no fee is charged, and that California physicians do not refuse their services in childbirth, regardless of the patient's ability to pay, nor do they refuse their services during the period of gestation and the necessary

period after birth. By resolution, the state medical society has gone on record as stating that every physician's office in California is a medical center to which any and all people may go and receive services upon the condition that those who cannot pay, or who can pay part, will receive the same consideration as those who can pay the regular fees. The California physicians are ready and willing to increase the amount of free work, and they are willing to help both with services and taxes the state and county health authorities—to extend help wherever help is needed to those who are unable to pay for it themselves, but they do not feel obligated in any way whatsoever to extend this offer to the Department of Labor in Washington and to lay people who already in many instances are busy undermining their physicians in California and other states. Foisting the Sheppard-Towner law on the states is like attempting to foist compulsory health insurance on the states, and is but another step toward the socialization of medicine. What has occurred and is occurring in California is going to occur in every state in the Union unless the medical profession awakens to the dangers that threaten.

ANYONE who conducts a health department in a lay paper is flooded with letters from people in all walks of life in which advice is sought concerning real or imaginary ills. We have been permitted to read quite a large number of inquiries, and are surprised at the frequency with which the complaint is made that consultation with so-called reputable physicians has resulted in not only no benefit but, in reality, no advice as to the nature of the malady and oftentimes but little recommendation as to the treatment or care of it. One lawyer, evidently from the tone of his letter an educated man, wrote that he had consulted numerous doctors for the relief of a skin infection, receiving a different opinion from each doctor consulted, and each loading him down with lotions, salves and injunctions as to diet, without bringing about any relief. Finally, in desperation, he consulted a doctor having the reputation of being an advertising quack who, without any particular examination, made a diagnosis of syphilis, offered to guarantee a cure on the payment of quite a large sum of money, half down and the balance when cured, and carried out the contract with satisfactory results. The lawyer then very pertinently remarks, "Why advise the public to consult the family physician or only reputable doctors when experiences like mine can be duplicated many times?"

Very naturally the question arises as to what kind of so-called reputable physicians the lawyer consulted? In this day and age there is no excuse for not obtaining the services of a thoroughly well trained and trustworthy physician, and if he fails, how much more likely to fail is the man without training and experience, or the adver-

tising quack who almost invariably belongs to that class? Certainly the public needs education as to the qualifications of medical men, but is it not true that we still have much to do in the way of educating members of our profession to look upon real or imaginary ills as worthy of their best efforts in an endeavor to make a correct diagnosis as an aid to the decision as to the treatment to be employed. There are altogether too many doctors who are superficial in their examinations, with consequent possibilities of error in conclusions. We do not practice an exact science, but there is no excuse for the glaring errors and contradictory findings which are a part of the careless and superficial methods employed by altogether too large a number of physicians.

DEATHS

FRANK A. CHITWOOD, M.D., of Connersville, died September 14 at the age of 76 years.

HENRY GREGORY, M.D., of Laurel, died September 2 at the age of 72 years. Death resulted following an attack of heart disease.

ABRAHAM PARKER, M.D., of Kirklint, died September 5 at the age of 68 years. Doctor Parker graduated from the Kentucky School of Medicine in 1893. He was a member of the Clinton County Medical Society, the Indiana State Medical Association and the American Medical Association.

IRA L. TURMAN, M.D., of Cynthiana, died September 14 at the age of fifty-four years. Dr. Turman graduated from the University of Louisville, Medical Department, in 1898. He was a member of the Carroll County Medical Society, the Indiana State Medical Association and the American Medical Association.

ORFILA L. STEVENS, M.D., of Indianapolis, died September 23 at the age of 51 years. He graduated from the Central College of P. and S., in 1896. Doctor Stevens was a member of the Marion County Medical Society, the Indiana State Medical Association and was a Fellow in the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. RAYMOND J. BERGHOFF, of Fort Wayne, and Miss Kathryn Martin were married September 18.

DR. D. A. BETHEA, formerly of Terre Haute, has moved to Muncie, where he has taken up the practice of medicine.

DR. ST. JOHN LUKEMEYER, of Francisco, and Miss Mary Frances Throop, of Paoli, were married September 15.

At a meeting of the Muncie Academy of Medicine, held September 14, Dr. Louis Segar, of Indianapolis, presented a paper on "Pyelitis in Infants".

At the International Surgical Congress, held in London, Dr. Davide Giodano, Venice, Italy, was elected president to succeed Sir William Macewen.

DR. FRED AUSTIN, of Bloomington, and Miss Joan Newby, also of Bloomington, were married September 11 at the home of Mr. and Mrs. Arthur H. Newby.

THE Carroll County Medical Society held a meeting at Burrows, Friday, September 14. A paper was presented by Dr. George F. Keiper, of Lafayette.

DR. W. J. BRANSFIELD, of Philadelphia, has been appointed clinical professor of surgery at the Woman's Medical College of Pennsylvania, and a member of the surgical staff at the hospital of the college.

THE annual congress of the American Academy of Ophthalmology and Otolaryngology will be held at Washington, D. C., during the week of October 15.

THE Tri-County Medical Society held a meeting at Rushville, September 12. Dr. Edwin G. Kyte, of Indianapolis, presented a paper on "Glandular Therapy".

FOLLOWING the death of Dr. Ezra Read Larned, Dr. Earl Miller has been appointed director of the department of experimental medicine of Parke, Davis & Company, Detroit. Dr. Miller was assistant to Dr. Larned for twelve years.

THE Elkhart County Medical Society held a dinner-meeting at the Hotel Coppes, Nappanee, September 12. A paper was presented by Dr. Herbert Schlosser, of Elkhart, on "Diabetes and Its Control with Insulin". Dr. P. C. Traver, of South Bend, presented a paper on "Tuberculosis of the Kidney".

THE Northwestern Indiana Academy of Medicine, comprising Steuben, LaGrange and DeKalb counties, held a meeting at Kendallville, September 13. A banquet was given at Gawthrop Inn. Dr. Charles A. Elliott, of Chicago, presented a paper on "The Gall-bladder as a Factor in Gastro-Intestinal Disturbances".

THE Thirteenth District Medical Society held a meeting at Pretty Lake, September 7. Papers were presented by Drs. John C. Bone, of South Bend; C. C. DuBoise, of Warsaw; H. H. Martin, of LaPorte; E. R. Borley, of South Bend; P. G. Skillern, of South Bend; C. E. Reed, of Culver, and Charles H. Good, of Huntington.

THE Eleventh District Medical Society will hold its annual meeting October 18, at Logansport. Dr. Carl W. Sawyer, of Marion, Ohio, will present a paper on "The Patient and What the Family Physician Can Do for Him". Addresses will be given by Professor Wilbur E. Post, of Chicago, and Dr. C. W. Walters, of Indianapolis.

THE Harvard Alumni luncheon was held at the Elks' Club, Terre Haute, Thursday, at 6.00 p. m., with Dr. John Lovett Morse, professor of pediatrics, as the guest of honor. Those present were Drs. E. O. Nay, W. E. Gabe, Freeman H. Hibben, C. O. McCormick, J. C. Carter, B. F. Beavers, L. H. Segar, Miles F. Porter, Jr., W. W. Carey, R. A. Milleken and E. DeWolf Wales.

At a meeting held September 18, the Union and Wayne County Medical Societies completed the process necessary for the unification of two county societies. This new unit will be known as the Wayne-Union County Medical Society. A paper was presented by Dr. Alfred Friedlander, of the University of Cincinnati, his subject being "Cardiac Arrhythmias; Their Recognition and Management".

To any physician interested, the Indiana Tuberculosis Association, Indiana Pythian Building, Indianapolis, will send a pamphlet on the Abrams treatment which they have published recently. The pamphlet contains the report of the Indiana Section of the American Chemical Society, in which an investigation of the Abrams machine showed very clearly its failure to carry out the claims made for it by its advocates.

DURING the State Meeting at Terre Haute, Sept. 27, 1923, twenty-two Rush Medical College Alumni members met at the Terre Haute House for noon luncheon.

Dr. E. B. McAllister, president of the Vigo County Medical Society, presided and toasts were responded to by: Drs. J. R. Crowder, Sullivan, Ind.; E. E. Padgett, Indianapolis, Ind.; F. E. Wiedeman, Terre Haute, Ind.; I. M. Casebeer, Clinton, Ind.; James E. Donnelly, Terre Haute, Ind.; E. J. Davis, Mooreland, Ind.; James F. Drake, Terre Haute, Ind.; Geo. T. Johnson, Terre Haute, Ind.; E. L. Inlow, Shelbyville, Ind.; G. D. Scott, Sullivan, Ind.; H. N. Thompson, Sullivan, Ind.; C. H. Good, Huntington, Ind.; R. P. Schuller, Kokomo, Ind.; Jas. J. Moorehead, Terre

Haute, Ind.; Fred Batman, Bloomington, Ind.; O. R. Rhodes, Toledo, Ohio; Ernest L. Mattox, Terre Haute, Ind.; M. A. Austin, Anderson, Ind.; E. B. McAllister, Terre Haute, Ind.; D. B. Miller, Terre Haute, Ind.; C. F. Briggs, Sullivan, Ind.

It is hoped that the Rush luncheon will become an annual affair and that many more will attend.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Argyn Tablets.

American Radium Appliance Co.:

Hydro Radium Activator.

Parke, Davis & Co.:

Tablets Tuberculin B. E.—P., D. & Co.

Tablets Tuberculin T. R.—P., D. & Co.

Malt Extract (Unmedicated)—P., D. & Co.

Malt Extract with Cod Liver Oil—P., D. & Co.

Tobacco Protein Extract Diagnostic—P., D. & Co.

Goldenrod Pollen Protein Extract Diagnostic—P., D. & Co.

Sal Ethyl Capsules, 5 minims.

E. R. Squibb & Sons:

Ampules Pituitary Solution—Squibb, 0.5 Cc.

Ampules Pituitary Solution—Squibb, 1 Cc.

Pollen Allergen Solution Timothy—Squibb.

Pollen Allergen Solution Ragweed—Squibb.

Swan-Meyers Co.:

Ragweed Pollen Extract—Swan-Meyers.

Wilson Laboratories:

Tablets Ovarian Substance—Wilson, 2 Gr.

Tablets Ovarian Substance—Wilson, 5 Gr.

Capsules Ovarian Substance—Wilson, 2 Gr.

Capsules Ovarian Substance—Wilson, 5 Gr.

Tablets Ovarian Residue—Wilson, 2 Gr.

Tablets Ovarian Residue—Wilson 5 Gr..

Capsules Ovarian Residue—Wilson, 5 Gr.

SOCIETY PROCEEDINGS

"LET'S GO—3000 MEMBERS FOR 1923"

To realize this, our President's slogan for this year, it will be necessary for every county society to increase its membership over that of 1922.

The following list comprises the counties who already have done this, and it is hoped that in the succeeding numbers of THE JOURNAL, this list will grow until it includes every county society. If the secretary of any of the smaller county societies will demonstrate to Dr. Combs that his county society cannot show further accessions because of the fact that every eligible doctor is already a member, the name of this secretary will be placed at the head of the list.

County	Secretary
1. Adams	B. F. Beavers
2. Dubois	W. D. Bretz
3. Elkhart	S. T. Miller
4. Knox	C. E. Stone
5. Noble	S. E. Munk
6. Whitley	F. G. Grisier
7. Allen	D. D. Johnston
8. Boone	W. H. Spieth
9. Daviess-Martin	H. C. Wadsworth
10. Gibson	A. H. Rhodes
11. Rush	J. M. Lee
12. Shelby	F. E. Bass

13. Warrick	W. P. Ford
14. Floyd	P. H. Schoen
15. Fulton	A. E. Stinson
16. Huntington	M. G. Erehart
17. Monroe	F. H. Austin
18. Porter	C. H. Dewitt
19. Clinton	L. L. Harding
20. Howard	Florence Olmsted
21. Kosciusko	O. H. Richer
22. Lake	E. E. Evans
23. Marion	Wm. A. Doeppers
24. Posey	John Ranes
25. St. Joseph	R. B. Dugdale
26. Wayne	R. L. Hiatt

INDIANA STATE MEDICAL ASSOCIATION

Terre Haute Session

September 26-28, Inclusive, 1923

The Terre Haute session long will be remembered by those in attendance as one of the most enthusiastic meetings that ever has been held. In the first place, the attendance exceeded all expectations of the local Committee on Arrangements, and for the first time in the history of the Association, a session held on the extreme edge of the state rivaled any meeting ever held in the Capital City. There were 603 physicians registered, and practically all of them came for the smoker and get-together meeting. An actual count in the ball room of the Deming early in the evening of the smoker showed over five hundred in the room at one time. Last year Muncie had the largest attendance of doctors, namely 522, that ever have assembled since the memorable session in 1915 in Indianapolis when 646 were registered. Counting all the ladies, guests and visitors, there was a total registration of 826 who partook of the hospitality of the Terre Haute doctors. As usual, there were still a number who did not register.

Each year the local committee on arrangements has difficulty in estimating the attendance of the ladies. This year there were 207 ladies registered, and slightly fewer than that last year at Muncie. It will, therefore, be a safe guess for the future hosts to count upon at least two hundred visiting ladies.

The scientific program was of a high order, and, remarkable to state, every paper on the program actually was read before the meeting. While no statistics in the past are at hand, it is safe to state that this meeting stands almost alone in this achievement. There was still, however, a number of absentees among the scheduled discussants.

The sections invited a larger number of outside guests this year than usual, and this undoubtedly served to augment the attendance by members. All of the guests invited were present with the exception of Doctor Clark, of Philadelphia, who was unavoidably detained after he had purchased his ticket and reservation. It was very fortunate that he could send Doctor Asnis, pathologist, who very ably presented his paper.

It is perhaps not too much to say that the public meeting addressed by Dr. Charles H. Mayo was the largest ever assembled for a meeting scheduled by the Indiana State Medical Association, as there were actually sixteen hundred present in the audience.

We were extremely fortunate in having another visitor whose name did not appear on the stated program—Dr. Olin West, secretary of the American Medical Association, attended the meeting of the Council and House of Delegates Wednesday night, and also addressed the general session Thursday morning. We felt highly honored at having a representative of the National Association with us for it is a real treat to the members to make the acquaintance of Dr. Olin West and be stimulated by his earnest advice and his gracious personality.

The Terre Haute committee evidently did not want the time to hang heavily upon any of those in attendance, as they kept something going on fairly continuously. They were not content to stop with the customary smoker

in the evening, but after that scheduled boxing contests which curtailed the usual hours allotted to sleep.

With the exception of not being able to allot a single room with bath for every doctor who came, there were no grounds for complaint concerning the hospitality in Terre Haute. It was almost impossible to spend money as food, cigars, soft drinks, garage space and souvenirs were distributed without stint. The graciousness of the mayor in allowing freedom from parking restrictions was very much appreciated, and was one of the several novelties which Terre Haute provided for its visitors. A notable feature of the meeting was the assistance rendered by the Boy Scouts in acting as guides to the visitors and as ushers at the Mayo meeting.

The commercial exhibitors were advantageously located, and were hearty in the praise of the meeting. As they attend nearly all of the state association meetings throughout the country, they are in a position to make comparisons, and Doctor Scott, of the Phillips Company, who has been attending conventions for the past thirty-eight years, stated that in his opinion this was the most cordial reception he ever had seen given at a state association meeting.

It has been evident the past few years that the automobile largely has supplanted other means of transportation in connection with the attendance at these meetings. Consequently, on the last day it is becoming more and more customary to start to drive home immediately after luncheon, leaving a small attendance at the Friday afternoon meeting. This year a smaller number than ever remained over for the last afternoon, and it was quite unfair to those who were on the program. By actual count, the audience at 2:00 p. m. Friday numbered eleven, of which six were Terre Haute doctors. Later on a few more came in, but the maximum number reached at any one time was twenty-three.

The present schedule of meetings was devised years ago and did not foresee this contingency. The House of Delegates, realizing that this situation should not be perpetuated, appointed a committee to rearrange the schedule with a view of avoiding the overlapping of meetings early in the session. This committee is empowered to take action before the next session at Indianapolis, and it is to be hoped that they will arrange for the House of Delegates to meet at 1:00 p. m. rather than at 7:00 p. m., and that further they will do away entirely with the Friday afternoon meeting.

It was suggested to the secretary that a list of delegates be printed in connection with the write-up of the Terre Haute session so that the officers and members of the county societies might know how well they were represented in the official deliberations of the Association. The following list is given as the total registration of delegates although not all of these delegates attended both of the meetings:

Adams County	B. F. Beavers
Bartholomew County	Lyman Overshiner
Boone County	W. H. Williams
Carroll County	E. D. Wagoner
Cass County	Geo. D. Miller
Clay County	F. C. Dilley
Clinton County	W. C. Mount
Daviess-Martin Counties	W. O. McKittrick
Decatur County	C. R. Bird
Delaware-Blackford Counties	W. A. Hollis
	E. H. Clauser
Elkhart County	A. C. Yoder
Fountain-Warren Counties	C. C. Wert
Franklin County	H. N. Smith
Fulton County	A. E. Stinson
Gibson County	A. R. Burton
Grant County	Geo. R. Daniels
Greene County	W. R. Cravens
Hamilton County	L. R. Lingeman
Hancock County	Jos. Allen
Hendricks County	O. T. Scamahorn
Henry County	E. Davis

Howard County	G. D. Marshall
Huntington County	Lucian Smith
Jennings County	W. H. Stemm
Johnson County	J. A. Craig
Knox County	J. N. McCoy
Kosciusko County	F. J. Young
Lake County	J. R. Pugh
	J. H. White
Madison County	E. F. Mobley
Marion County	A. L. Marshall
	C. H. McCaskey
	Edgar Kiser
	John Carmack
	John MacDonald
	Alfred Henry
	G. B. Jackson
	W. H. Foreman
Montgomery County	Fred A. Dennis
Owen County	Allen Pierson
Parke-Vermilion Counties	C. S. White
Pike County	T. W. Basinger
Randolph County	I. E. Brenner
Tiptecanoe County	F. S. Crockett
Tipton County	J. W. Cooper
Vanderburg County	A. M. Hayden
Vigo County	M. R. Combs
	W. D. Asbury
Wayne County	J. E. King

In addition to these, the following councilors were seated as delegates: J. H. Willis, Joseph Smadel, Walter Leach, J. H. Weinstein, S. E. Earp, E. M. Conrad, W. R. Moffitt, E. M. Shanklin, C. S. Black.

In accordance with the recent amendment to the by-laws, the following ex-presidents were also in the House with power to vote: C. S. Bond, M. F. Porter, W. N. Wishard, T. C. Kennedy, G. F. Keiper, J. R. Eastman, W. H. Stemm, David Ross and W. R. Davidson.

County secretaries are reminded again that it is the aim of the Association to have every constituent unit represented in the House of Delegates. If at the last minute it is found that your regularly appointed delegate cannot be present, you are urged to execute credentials for any member in good standing so that he may represent your county. On this occasion there were members present from counties not represented in the House of Delegates, and these members should have been empowered to act in the absence of the regular delegates.

CHARLES N. COOMBS, Secretary.

HOUSE OF DELEGATES

FIRST MEETING

The first meeting of the House of Delegates was held Wednesday evening, September 26, 1923, in the Central Christian Church, Terre Haute, the president, Dr. Charles H. Good of Huntington, presiding.

The secretary, Dr. Charles N. Combs of Terre Haute, called the roll of delegates and announced a quorum present.

The president of the Vigo County Medical Society announced the serious illness of Dr. M. R. Combs, chairman of the entertainment committee, and was instructed to convey to Doctor Combs the regret of the House of Delegates at his inability to attend.

It was moved by Dr. George F. Keiper that the reading of the minutes of the last meeting be dispensed with. Motion seconded and carried.

It was moved by Dr. A. L. Marshall, Indianapolis, that the report of the secretary-treasurer as printed in THE JOURNAL be accepted and approved. Motion seconded and carried.

The Credentials Committee reported 28 delegates present at roll-call.

It was moved by Dr. George D. Marshall, Kokomo, that the report of the Committee on Administration and Medical Defense be accepted as printed in THE JOURNAL. Motion seconded and carried.

In connection with the report of the Committee on Public Policy and Legislation, Dr. George F. Keiper recommended that the matter of the physician's fee under the Workmen's Compensation Law be referred to the Bureau of Legal Medicine of the American Medical Association.

Dr. F. W. Gregor, chairman of this committee, related some of the experiences of the committee in the Legislature, when they found some members of this Association opposing the provisions of the Medical Practice Act, and favoring the special legislation enacted for the osteopaths. Doctor Gregor recommended that a resolution be adopted by the House of Delegates urging the State Board of Medical Registration to secure the opinion of able counsel to resist this special legislation to the court of last resort before licensing these men.

On motion of Dr. J. R. Eastman, seconded by Dr. J. W. Carmack, the report as printed in *THE JOURNAL* was adopted.

Dr. W. N. Wishard spoke at length in regard to the report of the special committee appointed to organize the Bureau of Information, urging the support of the medical profession and asking for an additional appropriation of \$2,000 for this work. He stated that the original \$5,000 appropriated last year had not been used, but that it would require \$7,000 to finance the project this year.

It was moved by Dr. A. M. Hayden, Evansville, that an additional \$3,000 be appropriated for this purpose. Motion seconded by Dr. J. N. McCoy, Vincennes.

Dr. E. M. Shanklin, chairman of Council, asked for a reading of the treasurer's report and a careful consideration of the finances of the Association before such appropriation be made. After some discussion Doctor Hayden, with the consent of his second, changed his motion to read \$2,000 instead of \$3,000, and the amended motion giving the Committee a total of \$7,000, was carried.

It was moved by Dr. Fred C. Dilley, Brazil, that the dues of the Association be increased to \$5.00 a year. Motion seconded by Dr. A. M. Hayden.

Dr. E. M. Shanklin moved to amend the motion, making it read that the dues be \$7.00 a year. The amended motion was carried unanimously.

It was moved by Dr. Joseph H. Willis, Evansville, that the report of the Committee on Medical Education as printed in *THE JOURNAL* be adopted. Motion seconded and carried.

Dr. J. N. McCoy, Vincennes, presented the report of the Committee on Automobile Insurance, and moved its adoption. Motion seconded and carried.

The report of the Committee on Scientific Work was adopted, by consent.

It was moved by Dr. George Miller, Logansport, that the report of the Committee on Necrology as printed in *THE JOURNAL* be adopted. Motion seconded and carried.

On motion of Dr. George F. Keiper, duly seconded, the report of the Committee on Industrial and Civic Relationship as printed in *THE JOURNAL* was adopted.

The chairman then introduced Dr. Olin West, secretary of the American Medical Association, who made a short talk.

Under the head of New Business Dr. F. J. Young, Milford, presented the following resolution:

"BE IT RESOLVED, That the House of Delegates endorse the Kosciusko County report which sets forth a plan for obtaining medical legislation; and

"BE IT FURTHER RESOLVED, That the Council, officers and committees listed on the last page of the report be requested to cooperate in carrying out the provisions of the report, starting not later than November, 1923; and that the Secretary of the Indiana State Medical Association furnish them with copies of these resolutions and of the report."

On motion of Dr. George Miller the above resolution was adopted.

The chairman announced the addition of the name of Dr. C. Norman Howard, Warsaw, to the Committee on Public Policy and Legislation.

The chairman then presented the following resolution, which had been submitted to him:

"WHEREAS, The National Council of Health in cooperation with the Indiana State Board of Health is to carry on a campaign of medical examination on your birthday from July 4, 1923, to July 4, 1924;

"BE IT RESOLVED, That the Indiana State Medical Association endorse the work and that the president be instructed to name a member of the State Association to help carry out the program, as this is one of the late things that is to protect the health of the people."

On motion, duly seconded, this resolution was adopted, and the chairman appointed Dr. F. W. Foxworthy, Indianapolis, to assist in this work.

The House of Delegates adjourned until Friday morning at eight o'clock.

SECOND MEETING

The Friday morning session was called to order at eight-ten by the president, Dr. Charles H. Good.

Following roll-call, a quorum being present, the first order of business was Election of Officers, which resulted as follows: President, Dr. S. E. Earp, Indianapolis; first vice-president, A. A. Rang, Washington; second vice-president, Louis F. Ross, Richmond; third vice-president, J. T. Oliphant, Farmersburg; secretary-treasurer, C. N. Combs, Terre Haute. Delegates to A. M. A. (2 years)—A. E. Bulson, Jr., Fort Wayne; Geo. F. Keiper, Lafayette. Alternates—Harry Elliott, Brazil; J. A. MacDonald, Indianapolis. Council of Medical Defense—David Ross, Indianapolis. Committee on Hospital Standardization—J. H. Weinstein, Terre Haute.

The names of Councilors as printed in *THE JOURNAL* were approved, Districts 1 and 7 reporting that their meetings will be held later in the year.

On motion of Dr. A. E. Bulson, Jr., Indianapolis was chosen as the place of meeting for 1924.

It was moved by Dr. George D. Marshall that a rising vote of thanks be extended to the Terre Haute men for their efforts in behalf of the Association and for the great courtesy and hospitality shown the members; also that the Association express its appreciation of the fact that Dr. M. R. Combs was able to attend the last meeting of the House of Delegates. Motion seconded and unanimously carried.

The new president, Dr. S. E. Earp, was escorted to the chair and made a short talk.

Dr. George F. Keiper offered the following resolution: "RESOLVED, That all licensed physicians shall append to their written or printed names the title received at graduation, *i. e.*, 'M. D.'"

Motion seconded and carried.

Dr. W. F. Davidson, Evansville, brought up the question of the extra intern year and asked for an expression of the sentiment of this Association as an aid to the State Board of Medical Registration.

It was moved by Dr. A. E. Bulson, Jr., that the Indiana State Medical Association recommend that an intern year be made a part of the requirements for licensure in the State of Indiana, same to be effective as soon as possible. Motion seconded by Dr. J. A. MacDonald, and carried.

It was moved by Dr. George Miller of Logansport that the incoming president appoint the Automobile Insurance Committee for 1924. Motion seconded and carried.

Dr. F. S. Crockett, Lafayette, moved that a committee be appointed to consider the matter of changing the time of meeting of the House of Delegates so it will not interfere with the scientific sessions. Motion seconded and carried. The president appointed on this committee: F. S. Crockett, Lafayette; Geo. R. Daniels, Marion; G. B. Jackson, Indianapolis.

It was moved by Dr. George Miller that the above committee be authorized to fix the time of meeting for the House of Delegates. Motion seconded and carried.

It was moved by Dr. Bulson that the Committee on Civic and Industrial Relations be requested to be

more active in the interest of medical defense before the Compensation Board, or any other board, where the economical interests of the members are at stake, and that they appear before the Compensation Board, or any other board, in behalf of the members of this Association; and that their actual expenses and ten dollars a day per member be paid by the Association.

Motion seconded and carried.

By consent, the matter of consolidating county societies was referred to the Council, its recommendations to be reported to the House of Delegates at its next meeting.

Moved by Dr. George F. Keiper that a vote of thanks be given the officers of the Association for their unfailing courtesy and kindness during the past year.

Motion seconded and carried.

Adjournment.

CHARLES N. COMBS, Secretary.

THE COUNCIL

The Council of the Indiana State Medical Association convened at 5:00 p. m., September 26, 1923, at the Elks' Club, Terre Haute, Indiana, with Chairman E. M. Shanklin presiding.

Present, Drs. Shanklin, Smadel, Weinstein, Earp, Black, Willis, Leach, Moffitt, C. H. Good, president of the Association; C. N. Combs, secretary, and Dr. Olin West, secretary of the American Medical Association.

The minutes of the previous meeting were read and approved.

The councilors discussed the activities of their respective districts.

Adjournment.

CHARLES N. COMBS, Secretary.

GENERAL MEETINGS

FIRST MEETING

The first General Meeting was held in the ball room of the Hotel Deming, Terre Haute, Thursday morning, September 27th. The meeting was called to order at nine o'clock by the president, Dr. Charles H. Good of Huntington, who presented Dr. E. B. McAllister, president of the Vigo County Medical Association. Doctor McAllister in turn introduced Mayor Ora D. Davis, who welcomed the Association to Terre Haute.

The first vice-president, Dr. Wilson T. Lawson of Danville, presided while the president read his address.

The president then presented Dr. Olin West, secretary of the American Medical Association.

DR. OLIN WEST (Secretary American Medical Association): "Mr. President, Ladies and Gentlemen: It is a very great pleasure and privilege to appear before the Indiana State Medical Association as a representative of your organization, the American Medical Association. I have had the privilege of meeting with both your Council and your House of Delegates, and have been impressed with the careful thought exhibited by the delegates in handling the affairs of your Association. And now we come to the scientific assembly—the most important part of a medical organization. Medicine is a scientific proposition, and it is only by recognizing it as an art that organized medicine will fulfil its destiny. The material interests of the medical profession of course are important, but the real problem before the medical profession today is delivering to the people everywhere, rich and poor, who are in need of scientific medical service, the very best service possible, at a price the people can pay. One of the greatest purposes and duties of organized medicine is to labor for the perfection of the art and science of medicine, and as your president has said so eloquently in his address, when that comes to pass there will be no room for the fakes, the fads and the isms.

"The two great weaknesses in organized medicine are, first, that the individual members of the county medical societies do not take the active part they should take, and that it was supposed they would take when the

founders of organized medicine in this country formulated the scheme which is in force today. Only about 10 percent of the members take an active interest. Not more than one man in ten participates in the activities of the county societies. The other weakness is that the societies are not as active as they ought to be. We have 2,200, or more of them in this country, representing 2,489 counties. There are hundreds of societies that do not meet oftener than once or twice a year. There are too many men who want to be in the medical society because it gives them certain privileges with respect to securing positions as insurance examiners, or enables them to secure membership in some other society, or because they may want to move to another state and they cannot secure reciprocity unless they are members of their societies. That sort of man is not worth anything to a medical society, and we should be careful to keep him out, or put him to work if he gets in.

"I have seen enough here, from the doings of your Council and House of Delegates to make me believe that the Indiana State Medical Association is going to do something great in the interests of organized medicine, but primarily in the interests of human kind. I thank you kindly for your attention."

Dr. John A. MacDonald, Indianapolis, read a paper entitled "Insulin in Diabetes".

Dr. B. M. Edlavitch, Fort Wayne, read a paper entitled "General Clinical Management".

Dr. A. L. Walters, Indianapolis, read a paper entitled "Discovery and Development of Insulin".

Dr. Miles F. Porter, Fort Wayne, read a paper entitled "Surgical Aspect".

The above symposium was discussed by Drs. Charles P. Emerson, Indianapolis; C. A. Sellars, Hartford City; J. H. Warvel, Indianapolis; I. C. Barclay, Evansville; W. D. Gatch, Indianapolis; James J. Moorhead, Terre Haute; and the discussion closed by Dr. J. A. MacDonald.

The General Meeting adjourned.

SECOND MEETING

The Friday afternoon meeting was called to order at two o'clock, Dr. Wilson T. Lawson, first vice-president, presiding.

Dr. W. W. Carey, Fort Wayne, read a paper on "Physiotherapy". This paper was discussed by Dr. D. R. Ulmer, Terre Haute, and the discussion closed by Dr. W. W. Carey.

Dr. C. M. Mix, Muncie, read a paper entitled "The Radical Cure of Cystocele". This paper was discussed by Dr. D. R. Ulmer, Terre Haute.

Dr. D. R. Ulmer, Terre Haute, read a paper entitled "Gonorrheal Infection in the Female". This paper was discussed by Dr. J. R. Yung, Terre Haute, and the discussion closed by Dr. D. R. Ulmer.

It was moved by Dr. D. R. Ulmer that a rising vote of thanks be extended to Dr. M. R. Combs, for his work as committeeman in charge of the preparations for this meeting of the Association. Motion seconded by Dr. J. R. Yung, and carried.

The Association adjourned *sine die*.

SECTION ON SURGERY

FIRST MEETING

The Thursday afternoon meeting was called to order at two-ten by the chairman, Dr. A. P. Roope of Columbus.

In the absence of Dr. W. L. Clark of Philadelphia, Dr. E. J. Asnis of Philadelphia presented a paper on "Treatment of Neoplastic Diseases by Combined Methods". This paper was discussed by Drs. T. C. Kennedy, Indianapolis; Charles Stoltz, South Bend, and the discussion closed by Dr. E. J. Asnis.

Dr. Vilray P. Blair, St. Louis, presented a series of lantern slides illustrating "Various Kinds of Face Deformities Helped by Operation".

Dr. W. H. Stemm, North Vernon, read a paper entitled "Acute Infective Osteomyelitis". This paper was discussed by Drs. George D. Marshall, Kokomo, and C. M. Mix, Muncie.

Dr. G. B. Jackson, Indianapolis, read a paper entitled "Major Surgical Obstetrics". This paper was discussed by Drs. C. O. McCormick, Indianapolis; A. C. McDonald, Warsaw, and the discussion closed by Dr. G. B. Jackson.

Dr. Ernest Rupel, Indianapolis, read a paper entitled "Experimental Studies of Kidney Regeneration". This paper was discussed by Drs. David Ross, Indianapolis, and William S. Ehrich, Evansville.

Section adjourned until Friday morning.

SECOND MEETING

The Friday morning meeting was called to order at nine-thirty by the chairman, Dr. A. P. Roope of Columbus.

The first order was Election of Officers, which resulted as follows: Chairman, E. E. Padgett, Indianapolis; vice-chairman, E. S. Jones, Hammond; secretary, Merrill S. Davis, Marion.

Dr. W. D. Little, Indianapolis, read a paper entitled "Some Problems of Blood Transfusion". This paper was discussed by Drs. Eli A. Jones, Hammond; Elmer Funkhouser, Indianapolis; E. Vernon Hahn, Indianapolis; Bernhard Erdmann, Indianapolis; H. O. Mertz, Indianapolis; Homer Woolery, Bloomington; G. B. Jackson, Indianapolis, and the discussion closed by Dr. W. D. Little.

Drs. H. G. Hamer and H. O. Mertz, Indianapolis, presented the subject of "The Importance of Anomalies in the Diagnosis and Treatment of Diseases of the Urinary Organs". These papers were discussed by Drs. F. S. Crockett, Lafayette; G. B. Jackson, Indianapolis; Bernhard Erdman, Indianapolis; Elmer Funkhouser, Indianapolis, and the discussion closed by Dr. H. O. Mertz.

Dr. E. B. Mumford, Indianapolis, read a paper entitled "Parham-Martin Bands in Fractures of Long Bones". This paper was discussed by Drs. L. A. Ensminger, Indianapolis; George D. Marshall, Kokomo; H. R. Allen, Indianapolis, and the discussion closed by Dr. E. B. Mumford.

Drs. Karl Ruddell and A. E. Guedel, Indianapolis, presented the subject of "Muscular Rigidity Under General Anesthesia". This paper was discussed by Drs. O. G. Pfaff, Indianapolis; F. H. Jett, Terre Haute, and the discussion closed by Dr. A. E. Guedel.

Dr. Floyd Romberger, Lafayette, read a paper entitled "Anesthesia from a Review of 2,500 Cases". This paper was discussed by Drs. Etta Charles, Anderson; W. C. Reed, Bloomington; and the discussion closed by Dr. Floyd Romberger.

The Section adjourned.

SECTION ON MEDICINE

FIRST MEETING

The first meeting of the Section on Medicine of the Indiana State Medical Association was called to order in the ball room of the Hotel Deming, Terre Haute, on Thursday, September 27, 1923, at 2:15 p. m., by the chairman, Dr. B. R. Kirklin, Muncie.

Dr. W. A. Fankboner, Marion, presented a paper on "Epidemic Encephalitis—After Effects". Discussed by Drs. C. F. Neu, Indianapolis; L. D. Carter, Indianapolis; Albert E. Sterne, Indianapolis; and in closing by Doctor Fankboner.

Dr. A. B. Graham, Indianapolis, presented a paper entitled "A Preliminary Report of the Use of Quinin and Urea Hydrochloride in the Treatment of Fissure Ani". Discussed by Drs. J. W. Ricketts, Indianapolis; George R. Daniels, Marion; James A. Craig, Greenwood; and in closing by Doctor Graham.

Dr. John Lovett Morse, Boston, Massachusetts, addressed the Section on "Physical Examination of Infants

and Children". Discussed by Drs. Ada Schweitzer, Indianapolis; Albert E. Sterne, Indianapolis; and in closing by Doctor Morse.

Dr. Clyde L. Cummer, Cleveland, Ohio, presented a paper on "Secondary Anemia; Important Possibilities to Be Considered in Making a Differential Diagnosis". Discussed by Drs. Miles F. Porter, Jr., Fort Wayne; W. D. Asbury, Terre Haute; John Lovett Morse, Boston, Massachusetts; R. M. Moore, Indianapolis; and in closing by Doctor Cummer.

At the suggestion of the chairman a rising vote of thanks was extended to Doctor Morse and Doctor Cummer for their excellent contributions.

Dr. L. P. Harshman, Fort Wayne, read a paper entitled "Diphtheria Control". Discussed by Dr. Ada Schweitzer, Indianapolis, and in closing by Doctor Harshman.

Dr. F. W. Foxworthy, Indianapolis, presented an address on South American hospitals, illustrated by lantern slides. No discussion.

Adjournment at 6:00 p. m. to reconvene at 9:00 a. m. on Friday.

SECOND MEETING

The second meeting of the Section on Medicine of the Indiana State Medical Association was called to order in the ball room of the Hotel Deming, Terre Haute, on Friday, September 28, 1923, at 9:15 a. m., by the chairman, Dr. B. R. Kirklin, Muncie.

Election of Officers: The following were elected to serve as Section Officers for the ensuing year: Chairman, Dr. C. G. Beall, Fort Wayne; vice-chairman, Dr. T. J. Beasley, Indianapolis; secretary, Dr. B. G. Keeney, Shelbyville.

Dr. Grace L. Homman, Laporte, presented a paper on "Arthritis of the Spine". Discussed by Drs. H. J. Pierce, Terre Haute; George D. Marshall, Kokomo; A. M. Cole, Indianapolis; Chas. F. Voyles, Indianapolis; and in closing by Doctor Homman.

Dr. Thos. J. Beasley, Indianapolis, read a paper on "Tuberculosis of the Bronchial Lymph Glands". Discussed by Drs. S. E. Earp, Indianapolis; C. R. Bird, Greensburg; Marcus W. Lyon, South Bend; Edward M. Amos, Indianapolis; and in closing by Doctor Beasley.

Dr. A. S. Gordiano, South Bend, read a paper entitled "The Frequency of Thymic Hyperplasia in Toxic and Non-Toxic Goiters". Discussed by Dr. Marcus W. Lyon, South Bend.

Dr. F. E. Sayers, Terre Haute, presented a paper on "Syphilis of the Lung". Discussed by Drs. F. M. Gastineau, Indianapolis; Chas. F. Voyles, Indianapolis; A. S. Gordiano, South Bend, and in closing by Doctor Sayers.

Dr. A. M. Cole, Indianapolis, presented a paper entitled "Use of X-Ray and Radium in the Treatment of Superficial Malignancy". Discussed by Drs. H. J. Pierce, Terre Haute; B. R. Kirklin, Muncie; Thos. C. Kennedy, Indianapolis.

Dr. B. R. Kirklin moved that a rising vote of thanks be extended by the Section on Medicine to the Academy of Medicine of Terre Haute and the Vigo County Medical Society for the splendid hospitality and the many courtesies which had been extended to the visiting physicians. Motion seconded and unanimously carried.

As this concluded the program the Section on Medicine adjourned at 12:40 p. m. *sine die*.

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

FIRST MEETING

The Section was called to order at 2:00 p. m., Dr. Harry Boyd-Snee, vice-chairman, presiding.

Dr. E. M. Shanklin, Hammond, read a paper on "Post-Refractive Considerations". Discussed by Drs. J. R. Newcomb, Indianapolis; George F. Keiper, Lafayette; J. P. Worrell, Terre Haute; C. N. Howard, Warsaw; Albert E. Bulson, Jr., Fort Wayne; in closing, Doctor Shanklin.

Dr. Eugene L. Bulson, Fort Wayne, read a paper on "The Diagnosis and Localization of Foreign Bodies in the Air Passages". Discussed by Drs. W. F. Molt, Indianapolis; E. McGinnes, Chicago; J. R. Gillum, Terre Haute; D. O. Kearbey, Indianapolis; Albert E. Bulson, Jr., Fort Wayne; H. J. Pierce, Terre Haute; in closing, Dr. Eugene L. Bulson.

Dr. E. McGinnes, Chicago, read a paper on "Conservatism in Ethmoid Surgery". Discussed by Drs. Karl Brown, Muncie; A. E. Bulson, Jr., Fort Wayne; J. W. Carmack, Indianapolis; C. H. McCaskey, Indianapolis; W. A. Hollis, Hartford City; D. O. Kearbey, Indianapolis; in closing Doctor McGinnes.

Dr. R. E. Repass, Indianapolis, read a paper on "The Association of Para-Nasal Sinus Infection with Broncho-Pulmonary Disease". Discussed by Dr. J. W. Wright, Indianapolis.

SECOND MEETING

The following officers were elected: Chairman, Dr. Harry Boyd-Snee, South Bend; vice-chairman, Dr. D. O. Kearbey, Indianapolis; secretary, Dr. E. M. Shanklin, Hammond.

Dr. B. J. Larkin, Indianapolis, read a paper on "The Etiology of Retinitis Proliferans".

Dr. Martha Brewer Lyon, South Bend, read a paper on "Retinitis Proliferans," by Drs. E. J. Lent and Martha Brewer Lyon, South Bend.

These two papers were discussed by Drs. A. L. Marshall, Indianapolis; J. P. Worrell, Terre Haute; George Smith, Newcastle; B. J. Larkin, Indianapolis; Martha Brewer Lyon, South Bend.

Dr. J. R. Gillum, Terre Haute, read a paper on "Dacryocystorhinostomy". Discussed by Drs. J. P. Worrell, Terre Haute; O. T. Allen, Terre Haute; D. O. Kearbey, Indianapolis; C. N. Howard, Warsaw; W. E. Stewart, Terre Haute; J. R. Gillum, Terre Haute.

WABASH COUNTY MEDICAL SOCIETY

A meeting of the Wabash County Medical Society was held on September 20, 1923, at the Hotel Indiana, Wabash. Dr. Charles J. McIntyre, of Indianapolis, presented a paper on "Prophylactic Treatment of Diseases of the Heart".

THIRTEENTH DISTRICT MEDICAL SOCIETY

The 35th meeting of the Thirteenth District Medical Society was called to order by President Howard O. Shafer at 11:15 a. m., September 6, 1923, in the pavilion at Pretty Lake near Plymouth.

The minutes of the preceding meeting were read and approved.

The morning program was as follows:

(1) "The Immediate and Remote Effects of Nasal Disease and Deformation, with Case Reports," John C. Boone, South Bend. Discussion: M. M. Sears, Elkhart; G. W. Spohn, Elkhart; C. N. Howard, Warsaw, and J. C. Boone, in closing.

(2) "Diphtheria," illustrated by charts, C. C. DuBois, Warsaw. Discussion: J. C. Fleming, Elkhart; G. W. Spohn, Elkhart; C. E. Reed, Culver; O. H. Richer, Warsaw; J. N. Kelly, Westville; G. W. Kimball, LaPorte; M. M. Sears, Elkhart; C. G. Mackey, Culver; F. E. Radcliffe, Bourbon; C. R. Long, Pierceton; and C. C. DuBois, in closing.

Upon adjournment at 1:00 p. m., the members and guests drove around the lake to the Country Club where a splendid chicken dinner was served.

The afternoon session was called to order by the President at 2:30. Representatives of four cities invited the society to hold the next meeting with their respective city societies—Warsaw, LaPorte, Elkhart and South Bend. The Treasurer's report was read by the Secretary-Treasurer. The President named a committee consisting of A. C. McDonald, Warsaw, Chairman; G. W. Kimball, LaPorte, and C. E. Reed, Culver, to nominate

officers to audit the Treasurer's books and to select the next place of meeting.

After the second paper of the afternoon, the committee reported the financial statement to be correct, recommended LaPorte as the next place of meeting and submitted the following ticket: For President, F. E. Radcliffe, Bourbon; Vice-President, H. L. Cooper, South Bend; Secretary-Treasurer, J. A. Work, Jr., Elkhart; and Counselor, C. N. Howard, Warsaw. All three recommendations were adopted by vote of the Society, and the ticket was declared elected.

The afternoon program was given as follows:

(3) "Interpretation of Upper Abdominal Symptoms," H. H. Martin, LaPorte. Discussion: C. C. Terry, South Bend; H. M. Hall, New Carlisle; Charles Stoltz, South Bend; G. W. Spohn, Elkhart; H. M. McCracken, Argos; H. F. Mitchell, South Bend; F. P. Eastman, South Bend; J. C. Fleming, Elkhart; and H. H. Martin, in closing.

(4) "The Medical Management of Peptic Ulcer," E. R. Borley, South Bend. Discussion: O. H. Richer, Warsaw; C. L. Amick, Wakarusa; F. M. Patton, Elkhart; H. M. Hall, New Carlisle; A. C. McDonald, Warsaw; G. W. Anglin, Warsaw; J. A. Work, Jr., Elkhart; and E. R. Borley in closing.

(5) "Abdominal Operations Under Local Anesthesia," illustrated by lantern slides, P. G. Skillen, South Bend. Discussion: A. C. McDonald, Warsaw; J. C. Fleming, Elkhart; C. C. Terry, South Bend; H. H. Martin, LaPorte; H. F. Mitchell, South Bend; H. O. Shafer, Rochester; and P. G. Skillen in closing.

The session was favored by the presence of President Charles H. Good, Huntington, who gave a very forceful talk on "Organization".

Owing to the lateness of the hour, Major C. E. Reed asked to be excused from reading his paper and following a motion which was duly seconded and carried, his paper was held over until the next meeting.

Adjourned.

JAMES A. WORK, JR., Secretary.

CORRESPONDENCE

PROCRASTINATION AND INEFFICIENCY OF THE VETERANS' BUREAU

August 17, 1923.

Editor THE JOURNAL:

Reviewing the accomplishments of the Veterans' Bureau, let us consider that the Bureau is now employing a force of over thirty thousand, and the government is expending over \$500,000,000 per year in this service. The business is transacted from sub-districts, each sub-district employing ten or more doctors, a large clerical force, managers, sub-managers, co-ordinators, field men and nurses.

An ex-service man, feeling that he is entitled to compensation or vocational training, usually appeals to some local organization, either the American Legion, or, in some cases, to the local chapter of the Red Cross. In due time this individual is ordered to report to the sub-district office upon a specific day for examination. In due course of time he is examined and returns to his home, the examination frequently covering a period of two or three days, or when deemed necessary, the individual is hospitalized for observation. After a period of several weeks or months the Red Cross, or American Legion, upon inquiry, is told that the claim has been disallowed because disability is not of service origin. After a delay of several more months in securing necessary affidavits, the applicant is given a rating of twenty-five or fifty per cent, or total temporary disability, and may be offered vocational training either in section two or section three. There seems to be no consideration given the man's ability, and but little to his wishes regarding

training. Or, as is very often the case, after two or three years of constant effort and finally, as a result of an appeal to a senator or representative, consideration is given the claim.

The cases with which I have come in contact experiencing the most neglect are the T. B. and N. P. cases. A boy after having been rated as temporary total, and who has an active tuberculosis, upon the first examination, which usually takes place every six months and which discloses disease arrested, will have his compensation cut, which necessitates the individual's going to work. This means that his disease immediately becomes again active in the majority of cases.

The N. P. cases, so far as my observation goes, receive but little consideration unless the individual is actually crazy and it becomes necessary to care for him in some institution.

I have no personal knowledge of the operation of Veterans' Bureaus in other sub-districts, but I am very familiar with the one operating in my district, and while conditions have improved and are continually improving, still the ex-soldiers in many cases are sadly neglected and, as it seems to me, one of the main reasons for this neglect is the absolute ignoring of the family physician by the Bureau. These boys are ordered for examination and observation regardless of their physical condition, and if objection is raised they are intimidated by threatening to have their compensation withdrawn. One case in question. A boy with tuberculosis in active hemorrhage was ordered for examination and observation to Tennessee. When it was shown the bureau that this could not be carried out with safety to the patient, the doctor in charge was limited to ten treatments a month.

You are no doubt familiar with the fact that there is now an investigation of the Veterans' Bureau, the same being conducted by a committee of the United States Senate. That committee through its legal representative, is making an appeal to the Kiwanis Clubs, Rotary Clubs and other similar organization throughout the United States. It seems to me the medical profession should be in a position to assist this investigation better than any organization, and if the Veterans' Bureau is accomplishing the things for which it was organized, all well and good. Then let's get behind it and boost it; if it isn't, let's give the public the facts, because it will never be changed until so demanded by the public. This must come through education. I have given considerable of my time looking over many claims, and it is only after we appeal to our politicians, in many cases, that we receive any consideration at all. This to me, is one of the big objectionable features. It is allowing politicians, perhaps unconsciously, and unintentionally, to create an organization which, as time goes on, will be very hard indeed to dislodge.

Pardon me for writing at this length. A little agitation will do no harm. I know from personal experience.

Sincerely,

H. H. M.

CHRISTIAN SCIENCE

Chicago, Sept. 28, 1923.

Editor THE JOURNAL:

I am preparing a contribution, in book form, giving a showing on Christian Science, dealing with the subject from the medical point of view.

Every physician has knowledge of cases wherein favorable results reasonably could have been expected to follow the timely use of proper medical or surgical treatment, but which, through reliance on Christian Science, resulted in serious injury to the patient.

The "story" of such cases, told by representative physicians in language that will be fully understood by lay readers, will appear in the forthcoming volume.

I shall be under great obligation to any members of the medical profession who will favor me with assistance in the matter.

There will be no undesirable publicity, as no names

will be published. Your communication will be held strictly confidential.

With appreciation of the favor I am asking,

I am, cordially yours,

CHAS. E. HUMISTON, M.D.
449 N. Central Ave., Chicago, Ill.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

ARSPHENAMINE-SQUIBB, 1 GM. TUBES.—Each contains 1 Gm. arspenamine-Squibb (see New and Nonofficial Remedies, 1923, p. 49). E. R. Squibb & Sons, New York.

ARSPHENAMINE-SQUIBB, 1.2 GM. TUBES.—Each contains 1.2 Gm. arspenamine-Squibb (see New and Nonofficial Remedies, 1923, p. 49). E. R. Squibb & Sons, New York.

AMPULES PITUITARY SOLUTION-SQUIBB, 0.5 CC.—Each contains 0.5 Cc. pituitary solution-Squibb (formerly marketed as solution of hypophysis-Squibb, see New and Nonofficial Remedies, 1923, p. 219). E. R. Squibb & Sons, New York.

AMPULES PITUITARY SOLUTION-SQUIBB, 1 CC.—Each contains 1 Cc. pituitary solution-Squibb (formerly marketed as solution of hypophysis-Squibb, see New and Nonofficial Remedies, 1923, p. 219). E. R. Squibb & Sons, New York.

ENTERIC COATED TABLETS NEUTRAL ACRIFLAVINE—"NATIONAL", 0.0324 GM. ($\frac{1}{2}$ GRAIN).—Each tablet contains 0.0324 Neutral Acriflavine—"National" (see New and Nonofficial Remedies, 1923, p. 25), National Aniline & Chem., New York.

OINTMENT NEUTRAL ACRIFLAVINE—"NATIONAL".—Neutral acriflavine—"National" (see New and Nonofficial Remedies, 1923, p. 25) 1 per cent. dissolved in glycerin, 8 parts, and incorporated with a base composed of hydrous wool fat and petrolatum to make 100 parts. National Aniline and Chemical Co., New York.

POLLEN PROTEIN ALLERGENS-SQUIBB.—In addition to the Pollen Protein Allergens-Squibb listed in New and Nonofficial Remedies, 1923, p. 241, the following have been accepted: Apple Pollen Allergen-Squibb; Black Walnut Pollen Allergen-Squibb; Cherry Pollen Allergen-Squibb; Dandelion Pollen Allergen-Squibb. E. R. Squibb & Sons, New York.

GROUP ALLERGENS DIAGNOSTIC-SQUIBB.—In addition to the Group Allergens Diagnostic-Squibb listed in THE JOURNAL, August 4, 1923, p. 393, the following have been accepted: Group Allergens-Squibb Type XXIII (Ash, Cherry, Maple, Oak, Poplar, Willow). E. R. Squibb & Sons, New York (*Jour. A. M. A.*, Sept. 1, 1923, p. 749).

PROTEIN EXTRACTS DIAGNOSTIC—P. D. & Co.—In addition to the Protein Extracts Diagnostic—P. D. & Co.—listed in THE JOURNAL, August 11, 1923, p. 477, the following have been accepted: Goldenrod Pollen Protein Extract Diagnostic—P. D. & Co. and Tobacco Protein Extract Diagnostic—P. D. & Co. Parke, Davis & Co., Detroit.

THROMBOPLASTIN-LEDERLE.—An extract of cattle brain in physiological solution of sodium chlorid prepared according to the method of Hess. For a discussion of the actions, uses and dosage of brain extract see New and Nonofficial Remedies, 1923, p. 129, under Fibrin Ferment and Thromboplastic Substances. Thromboplastin-Lederle is marketed in 20 Cc. vials which bear an expiration date. Lederle Antitoxin Laboratories, New York. (*Jour. A. M. A.*, Sept. 15, 1923, p. 929).

POLLEN ALLERGEN SOLUTIONS-SQUIBB.—Solutions containing the sodium chloride soluble proteins from isolated pollens of various species of plants. For a discussion of the actions, uses and dosage, see Pollen and

Epidermal Extract Preparations and Biologically Reactive Food Proteins, New and Nonofficial Remedies, 1923, p. 234. Pollen allergen solutions-Squibb are intended for the prophylaxis and treatment of hay fever. They are marketed in the following forms: Set A: ten vials containing ten consecutive doses (Nos. 1 to 10); Set B: five vials containing five consecutive doses (Nos. 1 to 5); Set C: five vials containing five consecutive doses (Nos. 6 to 10); Set D: five vials of doses No. 10; Set E: five vials of dose No. 11. The following products have been accepted: Timothy Pollen Allergen Solution-Squibb and Ragweed Pollen Allergen Solution—Squibb. E. R. Squibb & Sons, New York.

RAGWEED POLLEN EXTRACT—SWAN-MEYERS.—A liquid obtained by extracting the dried pollen of ragweed with a liquid consisting of 67 per cent. glycerin and 33 per cent. saturated solution of sodium chloride. For a discussion of the actions, uses and dosage, see Pollen and Epidermal Extract Preparations and Biologically Reactive Food Proteins, New and Nonofficial Remedies, 1923, p. 234. The product is marketed in the following forms: Series 1: five vials containing five consecutive doses (Nos. 1 to 5); Series 2: five vials containing five consecutive doses (Nos. 6 to 10); Series 3: five vials containing five consecutive doses (Nos. 11 to 15); Complete Series: fifteen vials containing fifteen consecutive doses (Nos. 1 to 15). Swan-Meyers Co., Indianapolis.

LUMINAL TABLETS, $\frac{1}{2}$ GRAIN.—Each contains $\frac{1}{2}$ grain luminal (see New and Nonofficial Remedies, 1923, p. 63). Winthrop Chemical Company, New York.

MALT EXTRACTS (UNMEDICATED)—P. D. & Co.—A preparation essentially similar to extract of malt, U. S. P. (see New and Nonofficial Remedies, 1923, p. 177), but containing 10 per cent. of glycerin. 1 Gm. of the extract converts 5 to 7 Gm. of starch to maltose and dextrin in thirty minutes at 40 C. Parke, Davis & Co., Detroit.

MALT EXTRACT WITH COD LIVER OIL.—P. D. & Co.—Each 100 Cc. contains Norwegian cod liver oil, 25 Cc. and malt extract (unmedicated)—P. D. & Co., 75 Cc. Parke, Davis & Co., Detroit.

ARGYN TABLETS, 6 GRAINS.—Each tablet contains 6 grains argyn (see New and Nonofficial Remedies, 1923, p. 330). Abbott Laboratories, Chicago.

TABLETS OVARIAN SUBSTANCE—WILSON, 2 GRAINS.—Each tablet contains 2 grains ovarian substance—Wilson (see New and Nonofficial Remedies, 1923, p. 212). Wilson Laboratories, Chicago.

TABLETS OVARIAN SUBSTANCE—WILSON, 5 GRAINS.—Each tablet contains 5 grains ovarian substance—Wilson (see New and Nonofficial Remedies, 1923, p. 212). Wilson Laboratories, Chicago.

CAPSULES OVARIAN SUBSTANCE—WILSON, 2 GRAINS.—Each capsule contains 2 grains ovarian substance—Wilson (see New and Nonofficial Remedies, 1923, p. 212). Wilson Laboratories, Chicago.

CAPSULES OVARIAN SUBSTANCE—WILSON, 5 GRAINS.—Each capsule contains 5 grains ovarian substance—Wilson (see New and Nonofficial Remedies, 1923, p. 212). Wilson Laboratories, Chicago.

TABLETS OVARIAN RESIDUE—WILSON, 2 GRAINS.—Each tablet contains 2 grains ovarian residue—Wilson (see New and Nonofficial Remedies, 1923, p. 212). Wilson Laboratories, Chicago.

TABLETS OVARIAN RESIDUE—WILSON, 5 GRAINS.—Each tablet contains 5 grains ovarian residue—Wilson (see New and Nonofficial Remedies, 1923, p. 212). Wilson Laboratories, Chicago.

CAPSULES OVARIAN RESIDUE—WILSON, 5 GRAINS.—Each capsule contains 5 grains Ovarian Residue—Wilson (see New and Nonofficial Remedies, 1923, p. 212). Wilson Laboratories, Chicago. (*Jour. A. M. A.*, Sept. 29, 1923, p. 1113).

PROPAGANDA FOR REFORM

ADMINISTRATION OF INSULIN.—The present methods of administering insulin parenterally are far from satisfactory. Consequently, the earliest investigators of insulin and other pancreatic preparations attempted to secure physiologic effects by oral administration. There is evidence that slight effects may be obtained when insulin or other pancreatic preparations are introduced into the organism by way of the mouth under certain conditions. On the whole, however, the oral administration of insulin has proven quite inefficient. Rectal administration and nasal insufflation have been tried without success. A recent study showed that pancreatic extracts taken in capsule form by the stomach was not effective in decreasing blood sugar or urinary sugar. It is desirable to give wide publicity to the current limitations of a most promising therapy, since unscrupulous vendors are already attempting to distribute just-as-good pancreatic or antidiabetic preparations that are recommended for oral use. (*Jour. A. M. A.*, Sept. 1, 1923, p. 752).

EL ZAIR.—This is quackery's latest offer of an elixir of life. The nostrum is brought to the attention of the public by El Zair, Inc., New York. The firm claims that the elixir of youth has at last been found. Much is made of the endorsement which the late W. T. Stead is stated to have given the nostrum. El Zair is to be dissolved in water and applied by sponging the body with it daily. The A. M. A. Chemical Laboratory analyzed El Zair and reported that essentially it may be considered to consist of one part of glacial acetic acid and three parts of magnesium sulphate (Epsom salt) perfumed with oil of bergamot. The contents of a bottle of El Zair are to be dissolved in a pint of water and, therefore, an essentially similar solution can be made by dissolving $2\frac{1}{2}$ ounces of Epsom salt in a pint of distilled vinegar. (*Jour. A. M. A.*, Sept. 1, 1923, p. 768).

LACTIC ACID—PRODUCING ORGANISMS AND PREPARATIONS.—The Council on Pharmacy and Chemistry reports on the present status of sour milk therapy. During recent years reports have been published which indicate that the growth in the intestine of the normally present *Bacillus acidophilus* may be increased so as to make this the predominating organism, by the administration of lactose, by milk fermented with *Bacillus acidophilus*, or by the administration of viable cultures of *Bacillus acidophilus* in conjunction with lactose. Growing out of the claims of favorable therapeutic action, the use of so-called *Bacillus acidophilus* milk and other products prepared with *B. acidophilus* has become quite widespread. While no one subscribes today to the original theories of Metchnikoff, there are many who believe that the regulation of the bacterial flora is of importance. There is evidence that the administration of sour milk is at times beneficial, particularly in pediatrics. A wide clinical observation indicates that for certain types of gastric and intestinal disturbances, fermented milk accomplishes more than unfermented milk. (*Jour. A. M. A.*, Sept. 8, 1923, p. 831).

CALCIUM CHLORID IN HAY FEVER.—Calcium chlorid seems to be of some use in the treatment of hay fever, but it must be taken in rather large doses during the whole season to be of much benefit—about 1 gm., from four to six times a day. The use of this drug in hay fever is chiefly based on the work of European investigators who have shown that the permeability of the mucous membranes and of the capillaries is decreased by the internal application of calcium chlorid. The treatment is entirely symptomatic, and no permanent relief must be expected. (*Jour. A. M. A.*, Sept. 8, 1923, p. 850).

ACCIDENTS WITH LOCAL ANESTHETICS.—The chairman of the committee for the study of toxic effects of local anesthetics, appointed by the Therapeutic Research Committee of the Council on Pharmacy and Chemistry,

publishes a preliminary report. The committee has received reports of forty-two deaths following the use of local anesthetics occurring within the last few years. These accidents have not been reported on by former committees of the Association. The deaths reported are:

Anesthetic	Number
Stovain	1
Alypin	1
Procain	3
Apothesin	4
Butyn	4
Butyn and cocain	1
Procain and cocain	10
Cocain	18
Total	42

Under the headings Procain, and Procain and Cocain novocain is included: one is reported as procain and the other twelve as novocain. As the five deaths following the use of butyn are the first reported, the committee is very desirous of receiving full details of other fatalities for comparison of relative toxicity. These reports should be sent to the chairman of the committee, Emil Mayer, M. D., 40 East Forty-First Street, New York City. (*Jour. A. M. A.*, Sept. 15, 1923, p. 947).

SOME MORE MISCELLANEOUS NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Cowan's Rheumatism Herb (Rheumatism Herb Co.), consisting of dried and moldy leaves of a species of eucalyptus. Jad Salts (Wyeth Chemical Co., Detroit—not John Wyeth Bros., Philadelphia), consisting essentially of citric and tartaric acids, salt, baking soda, sodium phosphate and very small amounts of hexamethylenamin, lithium carbonate and potassium bicarbonate. Crane's Quinin and Tar Compound (Crane Medicine Co.), consisting essentially of quinin, sodium salicylate, ammonium chlorid, Epsom salt, oil of anise, tar, menthol, table salt, calcium phosphate, sugar, alcohol and water. Crane's Liver Pills (Crane Medicine Co.), consisting essentially of aloes and magnesium carbonate. Crane's Kidney Pills (Crane Medicine Co.), containing methylene blue, hexamethylenamin, plant extractive and iron sulphate. Tekol (Colonial Tablet Co.), containing ground celery seed and cocoa with about a half grain of caffeine in each tablet. Veronica Water (Veronica Medicinal Springs Water Co.), containing magnesium sulphate (Epsom salt), sodium nitrate, sodium chlorid (common salt), calcium bicarbonate, calcium sulphate and magnesium chlorid. (*Jour. A. M. A.*, Sept. 15, 1923, p. 946).

SO-CALLED "IMPROVED" ETHERS.—In 1919, Cotton declared that ethyl ether specially purified was not a good anesthetic, and that real anesthesia could not be obtained unless ether contained some potent synergist. He proposed the use of Cotton Process ether which was stated to be ether containing ethylene, carbon dioxid and ethyl alcohol. The manufacturer submitted Cotton Process Ether to the Council on Pharmacy and Chemistry, but so far, confirmation of Cotton's claims is lacking. Wallis and Hewer, of England, have also recommended a new general anesthetic with the claim that pure ether possesses practically no anesthetic properties, and that their product contains a mixture, in unspecified amounts, of ketones (identified only in vague terms) which have been treated previously with carbon dioxid and ethylene. This product has been placed on the market as "Ethanestal." It has received some endorsement, especially from Dr. H. E. G. Boyle, of London, who made it the subject of addresses on anesthesia in this country. In contradiction of the claims made for Cotton Process Ether and "Ethanestal," Bourne and Stehle showed that ether prepared in a way to exclude

impurities possesses the usual anesthetic properties. A painstaking investigation recently reported by Dale, Hadfield and King confirms the generally accepted belief that the anesthetic action of ether is due to the ether itself. They also report their examination of "Ethanestal." They found "Ethanestal" to contain 95.5 per cent. ether, 4 per cent. normal butyl alcohol, and 0.5 per cent. of a mixture of ethyl alcohol and an aldehyd and possibly traces of other substances. The investigation shows that there is no evidence to warrant attributing the anesthetic action of "Ethanestal" to any other constituent than the ether. On the contrary, the work shows that the anesthetic action of ether is improved by purification. (*Jour. A. M. A.*, Sept. 22, 1923, p. 1040).

ETHANESTAL.—In 1921, Dr. H. E. G. Boyle, London, read a paper before the Section on Miscellaneous Topics at the annual meeting of the American Medical Association. The paper dealt, in part, with so-called improved ether—"Ethanestal." The paper was not published in *The Journal A. M. A.* on the ground that *The Journal* does not publish articles on new remedies until those products have been reported on favorably by the Council on Pharmacy and Chemistry. The investigation of "Ethanestal" by Dale, Hadfield and King which makes plain the fallacy of the claims for the product, demonstrates again the advantages to the medical profession of a competent judicial body—the Council on Pharmacy and Chemistry—to investigate new additions to our materia medica. (*Jour. A. M. A.*, Sept. 22, 1923, p. 1025).

THE NATURE OF INSULIN.—The manufacture of insulin from the pancreas is a costly and laborious undertaking. Therefore, the artificial synthesis is important. Before the prospect of a synthesis can be entertained, however, the chemical structure must be ascertained. Evidence is developing that insulin is protein in nature. Consequently the hope of its isolation as a chemically pure substance becomes slender. (*Jour. A. M. A.*, Sept. 29, 1923, p. 1117).

BOOK REVIEWS

AN ESSAY ON PHYSIOLOGY OF THE MIND. By Francis X. Dercum, M.D., Ph. D., Professor of Nervous and Mental Diseases in the Jefferson Medical College, Philadelphia. 150 pages; W. B. Saunders & Company, Philadelphia and London; Cloth, \$1.75.

This is a very interesting essay on the physiology of the mind as based on biological, morphological, physical and chemical considerations. It discusses those reactions as affected by environment and which we speak of as "mind." Its author is a well-known neurologist and psychiatrist. The book will be found of interest to many scientists though rather technical for the lay reader.

HUGHES' PRACTICE OF MEDICINE. By R. J. E. Scott, M.A., B.C.L., M.D. Twelfth edition, enlarged and revised. Octavo 810 pages. Cloth, \$4.00. P. Blakiston's Son & Company, Publishers, Philadelphia, 1922.

This is a good, condensed elementary manual. It is a splendid work for students, and will be found of value to the general practitioner as a small and compact reference book. Its popularity is attested by twelve editions, and the present one embraces such changes and additions as necessary in order to bring it fully up to date. Additional sections on mental diseases of the skin are now included. The arrangement has been somewhat modified so that the specific infectious diseases are subdivided into four groups; diseases due to bacteria; diseases due to protozoa; diseases due to metozoa and diseases of unknown etiology. As a concise ready reference manual we hardly see how it could be improved upon.

(Continued on Adv. Page xx)

Anthrax and Tetanus are Seldom Found in Range Sheep

Armour's Sterile Catgut Ligatures are made from the intestines of range lambs. Regardless of that, as much care is taken at every step of processing as could be taken with "casings" gathered here and there, by manufacturers whose only facilities are the open market. We, being the source of supply, select the material that goes into surgical strings and, knowing its destiny, take every precaution to insure great strength and sterility.

We offer non-boilable sterile catgut ligatures 000, 00, 0, 1, 2, 3 and 4 plain, and the same in 10, 20, and 30 day chronic. These ligatures are very flexible. Also the same sizes and kinds in the boilable grade and iodized catgut ligatures, 000, 00, 0, 1, 2, 3 and 4.

Pituitary Liquid

The premier product of the Posterior Pituitary, $\frac{1}{2}$ c.c. ampoules (obstetrical), 1 c.c. ampoules (surgical), boxes of 6; also boxes of 50 for hospitals.

Elixir of Enzymes, digestant and vehicle. Benzoinated Lard U.S.P., Pepsin, Pancreatin, Thyroids, Suprarenals, Corpus Luteum, Ovarian Substance and other endocrines in powder and tablets.

Suprarenalin Solution 1:1000

Astringent and hemostatic. The one perfect preparation of Suprarenalin active principle, 1 oz. g.s. bottles with cup stopper. Suprarenalin Ointment 1:1000.



Booklet on the Endocrines
for Physicians and Pharmacists

ARMOUR AND COMPANY

CHICAGO

WALLACE-SOMERVILLE SANITARIUM



Succeeding the Pettet & Wallace Sanitarium

MEMPHIS, TENN.

WALTER R. WALLACE, M.D.
WILLIAM G. SOMERVILLE, M.D.

FOR THE TREATMENT OF

**DRUG ADDICTIONS, ALCOHOLISM
MENTAL AND NERVOUS DISEASES**

Located in the Eastern suburbs of the city.
Sixteen acres of beautiful grounds.
All equipment for care of patients admitted.

Louisville Neuropathic Sanatorium

INCORPORATED

1412 South Sixth Street, Louisville, Kentucky

and Nervous Diseases. Situated in residence portion of the city, yet quiet and retired. Rates furnished upon request.

W. E. GARDNER, A.B., M.D.
Medical Director

W. E. RENDER, M.D.
Resident Physician



(Continued from Page 358)

PHYSICAL EXERCISES FOR INVALIDS AND CONVALESCENTS. By Edward H. Ochsner, B.S., M.D., F.A.C.S., President Illinois State Charities Commission; Attending Surgeon Augustana Hospital, Chicago. Second edition. Price 75c. St. Louis: C. V. Mosby Company, 1923.

A little book of 56 pages which presents a series of physical exercises for patients who are convalescing from surgical operations or from some severe illness. The manual is short, compact, easily comprehended, convenient and inexpensive.

THE NOTE BOOK OF AN ELECTRO-THERAPIST. By Mel R. Waggoner, M.D., address and connections not given. Note book size, 135 pages, cloth, \$5.00. The McIntosh Electrical Corporation, Chicago.

This book reminds us of the story of the man who heard that strychnine was good for his nerves, so he procured a quantity and, probably on the theory that if a little was a good thing much would be better, he took a good-sized dose, resulting in a funeral a few days later. Electro therapeutic measures are valuable in selected cases, but the whole subject loses converts when a radical and wildly extravagant enthusiast like Waggoner attempts to show that electricity is good for practically every condition or ailment of the human body. Evidently the book is intended as an aid to the sale of electrical apparatus, but even at that it ought to fail, for no one but a half-baked doctor would place any credence in the teachings when once it is discovered that the whole attitude of the author is one of extravagant and inconsistent praise for an agent that has its limitations. We are still further amazed that a little note book should be rated by the publishers as worth five dollars and that there will be enough suckers in the medical profession to pay that price for it.

REGIONAL ANESTHESIA. By Gaston Labat, M.D., Lecturer on Regional Anesthesia at the New York University; formerly special lecturer on Regional Anesthesia, The Mayo Foundation, University of Minnesota. Foreword by W. J. Mayo, M.D., Octavo of 496 pages with 315 original illustrations. Philadelphia and London: W. B. Saunders Company, 1922. Cloth, \$7.00 net.

The value and the advantages of regional anesthesia are increasing every day. Every physician can make use of regional anesthesia, but in order to do it successfully the principles and technic of the procedure must be understood thoroughly. The injection of an anesthetic solution at random in the structures to be cut through is very easy, but the surgeon who avoids failure must have knowledge of the principles of regional anesthesia and the manner of application. As the author well says, experience is absolutely necessary. It can be acquired rapidly by practice providing one knows what to do and how to do it. This is what the author attempts to teach and he does it in a very satisfactory way. In a consideration of the subject the different segments of the body are studied from the viewpoints of anesthesia. Each procedure is preceded by a short review of the anatomy of the region, with special reference to nerve distribution in order to refresh the memory of the reader and to enable him to understand the different steps of the technic. Throughout the entire book the practical value of regional anesthesia is kept constantly in mind. Special chapters are devoted to operations on the eye, ear, nose and throat and genito-urinary organs, these departments of surgery being particularly interested in regional anesthesia. The possibilities of field block, paravertebral block and splanchnic anesthesia in abdominal surgery have been thoroughly established. Spinal anesthesia forms the subject matter of a separate chapter. In the foreword

by Dr. William J. Mayo, the statement is made that regional anesthesia will never displace general anesthesia but it should hold a high position in surgical practice and every young surgeon should perfect himself in its use. The facilities of the Mayo Clinic have been utilized in obtaining data for the book and various systems in its publication. The book is beautifully illustrated and it is so comprehensive and trustworthy in its teachings that no physician or surgeon interested in regional anesthesia can afford to be without it.

DISEASES OF THE EYE. By Sir John Herbert Parsons, C.B.E., D.S.C., F.R.C.S., F.R.S., Ophthalmic Surgeon, University College Hospital; Surgeon Royal London (Moorefield's) Hospital, London, 660 pages, 347 illustrations. Cloth. Price \$5.00. The Macmillan Company, New York City, 1923.

The reputation of the author as a writer, a teacher, and a clinician is almost a guarantee that anything coming from his pen would be unexcelled for the purpose intended, and this textbook on diseases of the eye fully meets all expectations. It is not a pretentious textbook, for it does not deal with rare conditions of the eye, and it does not deal exhaustively with any one subject. It does, however, give in concise language and with reasonable comprehensiveness all that is required in a textbook suitable for the student and general practitioner. All superfluous matter has been omitted, and while very naturally the author has emphasized those things which he individually thinks are essential, yet the very fact that he is an ophthalmologist of wide experience and practice is certainly sufficient to indorse all that has been offered. The chapters relating to fundus diseases are especially instructive and the illustrations excellent. To the book has been added some chapters on preventive ophthalmology and hygiene of vision, not ordinarily seen in textbooks. There also is a chapter, not of particular interest to American surgeons, on ocular requirements of candidates for admission into the public services of England.

GENERAL MEDICINE. Volume I, of the Practical Medicine Series. Edited by Charles L. Mix, M.D. Series 1923. Price \$3.00. Price, series of eight volumes, \$15.00. Year Book Publishers, Chicago.

This is the first volume of the Practical Medicine Series for 1923. The series comprises eight volumes on the year's progress in medicine and surgery under the general editorial charge of Charles L. Mix, M.D. The volume on general medicine is edited by Dr. George H. Saver, (infectious diseases and endocrinology); Laurason Brown (diseases of the chest excepting the heart); Robert F. Preble (diseases of the blood-making organs, blood vessels, heart and kidneys); Bertram W. Sippy (diseases of the digestive system and metabolism), and Ralph C. Brown. It is scarcely necessary to reiterate what has been said before concerning this series of eight volumes covering the entire field of medicine and surgery. Each volume is complete on the subject which it treats for the year prior to time of publication. The series is published primarily for the general practitioner. At the same time the arrangement in several volumes enables those interested in special subjects to buy only the parts they desire. Practically everything in the way of the latest knowledge concerning the subjects under discussion will be found in the Practical Medicine Series. The volume on General Medicine is no exception to the general rule. We heartily commend the series or any portion of it.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XVI

NOVEMBER, 1923

NUMBER 11

ORIGINAL ARTICLES

CONSERVATION IN ETHMOID SURGERY*

EDWIN MCGINNIS, A.B., M.D., F.A.C.S.
CHICAGO

The nose is the entrance to the upper respiratory tract, and physiologically it has most important functions; namely, to warm, moisten, and filter the inspired air. Besides, the end organs of olfaction are present in the upper part of the nose. Thus all surgical approach ought to take into consideration the nasal mucosa.

It is obvious that the removal of any considerable portion of the nasal tissue upsets its function, and this upsetting is part of the reason for the dissatisfaction of some of our operated cases. All of us have met with hesitation of patients when after nasal examination we have suggested some corrective operation. They say, "I have a friend who had a nasal operation without any apparent benefit. In fact he was worse off subsequently."

During the past year occasional papers have appeared condemning nasal surgery of the usual type. It is easy to be critical but not fair without something better to offer.

I see a good many end result cases of complete ethmoid exenteration with ablation of the middle turbinate and surgically they do not satisfy one's esthetic sense. Practically, they are cured of the ethmoid infection because the ethmoid is removed, but this sacrifice of tissue removes a good part of the olfactory membrane, and converts a slit into a wide open space. One case in point had a complete double ethmoidectomy done about eight years ago with relief of the ethmoid symptoms. During the warm weather she is comfortable, but as soon as cold weather begins she has a headache on going out, due to inspired cold air. She has the typical Sluder syndrome. If the nostrils are packed with cotton the pain disappears. She takes cold easily and these are usually acute infections of the frontal, antrum, or sphenoid. I have often wished that I could replace the middle turbinates, and some of the ethmoid tissue.

The olfactory sense is especially important to some people, as illustrated by the following: Dur-

ing the summer of 1918 a man consulted me for the relief of a copious nasal discharge, and loss of sense of smell. A few years before a double ethmoidectomy had been performed for relief of a bad bronchial asthma. This had been successful as to the cure of the asthma, but still he had a bad nasal discharge, and very little sense of smell. Ordinarily this would not have mattered, except for the fact that he was a coffee tester and needed his olfactory sense to retain his position.

My earliest thought was that a high septal operation would cure most of these cases, and in a certain proportion, if sufficient time elapses, this is true. It is not so long ago that we were treating furuncles with crucial incisions and carbuncles by extensive excision, but later experience has proved that the small incision is quite as efficacious in drainage.

For a good many years I have been trying to get my nose cases well by corrective surgery, and so have evolved a drainage procedure on the ethmoid. Dr. Pratt of Minneapolis practices a curettage of the ethmoid underneath the middle turbinal and turbinal plate. He advises removal of the mucous membrane of the cells.

Dr. Yankauer described a procedure similar to mine, and advises retention of the cell mucosa.

In a paper entitled "Intranasal Drainage of the Frontal Sinus and Anterior Ethmoid Cells" I have outlined the operative technique, and this only has to be enlarged a step to take in the posterior cells and so completely drain the ethmoid labyrinth.

Operation—Local Anesthetic. In most cases a preliminary high nasal septum resection is required.

1. Patient in the upright position.

2. Application of adrenalin 1/1000 on a cotton swab to the anterior end of the middle concha, and as high above this as you can go with comfort to your patient, and lastly, application to the septal mucosa opposite.

3. After shrinkage is complete, one more application of adrenalin on both sides of the concha and to the ethmoid bulla.

4. Two applications of cocaine 20 percent made to the surface above mentioned.

5. After waiting a few minutes proceed with the operation.

*Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the Terre Haute Session, September, 1923.

6. Patient's head in extreme extension with Grunwald's forceps, bite into the mound of an agger if one is present or into the front of the ethmoid labyrinth above the attachment of the middle turbinate, leaving the attachment intact. If there is one or more agger cells, part of the inferior, superior and posterior walls are cut away, and above these some of the front wall of the naso-frontal duct.

7. Next with the same forceps, push the free border of turbinate toward the septum and bite through the front of the lower cell of the ethmoid bulla; then bite a channel through the front wall of the bulla up to the frontal ostium. This opens all the anterior ethmoid cells and one posterior cell.

If it is necessary to drain the remaining posterior cells a channel is made through the posterior and upper wall of the bulla cells into the large posterior cells. One can see the interior of these cells as soon as entrance is accomplished. All the cutting is done under direct vision in an up-and-down direction, parallel with the orbital and turbinal plates.

On completion of this procedure all the ethmoid cells are opened, the normal ostia of most of them are undisturbed, the middle turbinate, and turbinal plate are intact, and most of the cell lining is in place.

There is very little hemorrhage because large vessels have not been cut. The vessels supplying this region are the anterior and posterior ethmoid, branches of the sphenopalatine, and infra-orbital course in the turbinal plate, and only small branches supply the cell walls. The cut edges are protected by the overhanging middle turbinate and turbinal plate. Our incisions remain open as long as there is need for drainage. In case of reinfection at some future time cells can be reopened. The normal cell ostia are not disturbed.

The recovery of the patient is usually rapid, and no after treatment is needed. I have had two cases with eye complications, one hemorrhage into the lower lid at time of operation and one hemorrhage into the orbit one hour after operation.

One has to be familiar with the anatomy to do this operation and I did it a good many times on the cadaver before attempting it on a patient.

In conclusion, drainage of the ethmoid cells has proven satisfactory in all types of ethmoid disease. The landmarks are present and if a reinfection occurs with insufficient drainage the incisions can be made as often as necessary. The protective mechanism of the nasal mucosa is practically intact.

DISCUSSION

DR. KARL T. BROWN (Muncie): There is no question but that the time has arrived for more conservative nasal, and especially ethmoidal, surgery.

The first essential to proper ethmoidal work is a thorough knowledge of the anatomy of the

ethmoidal "box". We must realize that we are treading on dangerous ground, as the dura of the cranial cavity and the periosteum of the orbit are in direct contiguity with the lining mucosa by means of blood vessels and nerves, and any forcible tearing of the mucous membrane may injure these structures. Infection also can travel with greater ease either during the operation or the process of repair, and it is therefore very essential that the membrane be disturbed as little as possible.

Dr. McGinnis states that he leaves the middle turbinate and turbinal plate intact and destroys very little of the cell lining. This I think is very important. We cannot be reminded too often that the mucous membrane of the nose is not just a lining to a canal through which we inhale air, but that it is an organ with a definite function to perform, and when this function is disturbed by the removal of an extended area of mucous membrane, we have left a cicatrix covered by epithelium which has no definite function.

DR. A. E. BULSON, JR. (Fort Wayne): The accessory sinuses of the nose need draining and ventilating very frequently, but that does not indicate that a mutilating operation is required, or that there should be extensive destruction of functioning tissue. Among poorly trained operators or among some operators who have never had any training at all, as for instance some general practitioners who are attempting nose surgery, the slaughter of the turbinates has reached the point where it is a real crime. Many of the patients from whom the turbinates have been removed are worse off than they were before, and not a few of them have had to be reoperated in order to drain or ventilate accessory sinuses which should have been given appropriate attention at the first operation. Dr. McGinnis has pointed out the way to do conservative ethmoid surgery, and we need more papers of that kind to stem the tide of radicalism in nasal surgery that has been prevalent for so long.

I wish to emphasize what the essayist has said concerning the need in some cases of ventilation when there is no fluid to be drained. In my experience ventilation alone has cured some cases of intractable headache, but the operator should reach the decision to operate in these cases by a process of exclusion.

Splitting the middle turbinate and crushing the sides together so that it collapses is an old trick of mine, and I am very glad to hear that Dr. McGinnis employs the same procedure in reducing the size of the turbinate that is producing trouble through obstruction and pressure.

DR. J. W. CARMACK (Indianapolis): The nose is such an important structure, and the more we see of it the more important it becomes to us, that we ought to approach an ethmoid operation with a great deal of temerity.

First, we should consider that the blood supply is directly carried from the nose into the cranial cavity, and we have here many possibilities; second, we should consider the importance of the nasal mucosa and that the result we will get ultimately is in proportion to the amount of damage that is already done in the nasal mucosa. In other words, if a nasal mucosa is already destroyed fifty percent, we are only going to get about a fifty percent result whatever we do in that nose. And when we stop to consider this then we ought to hesitate longer in taking out or destroying more of that nasal mucosa than we already have destroyed.

The cause of ethmoid disease is usually obstruction to the aeration and drainage of the ethmoid cells, primarily the nasal passages. Many times the condition does not demand an ethmoid operation, but a submucous operation or something which will give us aeration and permit drainage of the sinuses; and then later another most important thing and one which we cannot dispense with in the treatment of sinus disease, and that is negative pressure after we have established drainage. I do not believe that there is any operation that will end all cases of ethmoid disease.

In all of these ethmoid diseases we have either a periostitis or a true osteitis and we are not going to be able to take out all of that bone, so our best method is drainage, as Dr. McGinnis suggested, or in a modified way to suit the case. One of the big factors is suction drainage after one has established the free nasal passage.

DR. C. H. McCASKEY (Indianapolis): In the subject of ethmoidal surgery, there are many things to be taken into consideration.

The pathological conditions with which we are confronted oftentimes determine the operative procedure to be used. There are certain pathological conditions and ethmoidal conditions which require drainage and ventilation. There are other types of pathological conditions or infections which require, in my opinion, a so-called complete obliteration of the ethmoid, that is, if you want to get end results which are valuable.

This surgical technique in certain cases will remedy the condition; but there are other cases which do not clear up by this line of procedure, so I think we should draw the conclusion that the determining factor in your operative procedure should be the pathological condition.

All these cases should have after treatment. Perhaps the first thing that we should do in treating ethmoidal conditions is negative pressure and ventilation, preventing nasal obstructions which might interfere with drainage, and disposing of them. Then if you don't get what you are seeking, further drain the ethmoid; and if that doesn't give you an end result, then do a radical operation.

DR. GEORGE F. KEIPER (Lafayette): In the treatment of the cases referred to, I presume that we will not resort to surgery until we have tried ordinary means like suction or shrinkage of the mucous membranes of the ethmoid region. Somehow we lose sight of the physiology of the nose, that is, to warm and moisten the air in respiration. The nasal mucous membrane secretes two pints of fluid every day, and it is all consumed in the latter process. If the interior of the nose be reamed out we destroy the mucous membrane needed physiologically.

Anything that tends to conserve the structure of the nasal mucous membrane is to be welcomed. Not all the ethmoid cells are involved in a given inflammation, and surely not the middle turbinal bone. Hence any method as given us in the very excellent paper of Dr. McGinnis is to be welcomed. Personally I have attempted to secure the same results with the Mosher curette, first fracturing the middle turbinal inward, to secure the necessary room in which to work.

Ventilation is the keynote to success in the treatment of all conditions considered in the paper. Many are the headaches we have relieved since Sluder demonstrated to us the existence of vacuum headaches, by simply opening up the occluded fronto-nasal duct, and restoring ventilation to the sinus above, relieving the vacuum produced by the absorption of the oxygen of the imprisoned air. If this is possible in the frontal sinus, it is also possible in the ethmoid cells.

It now seems that the pendulum is swinging from the radicalism of the past to rational conservatism and we welcome such demonstrations as the doctor gives us today, in an attempt to conserve the real function of the nose. But with a pansinusitis present, with the mucous membrane of these structures purulent and polypoid, removal of the mucous membrane with the underlying bony structures also diseased may be necessary to procure cure. These cases fortunately are rather rare and are not to be taken as a justification for wholesale destruction of normal mucous membrane.

DR. W. A. HOLLIS (Hartford City): I am glad Dr. McGinnis advocates opening the lower part of the middle turbinate and drawing from there the same as from the other ethmoid cells, and that the crushing operation should be resorted to where practical. There is that means of recognizing the condition and saving a very useful organ.

Another thing that may defeat our aim in clearing up the pathology of the ethmoid cells is the traumatism we may produce. We may be ever so careful, even in packing the nose for anesthesia, yet may produce erosions of the mucosa, which later will cause adhesions between that part of the nose and the part that we have exenterated. It is always well to keep that in mind and to inspect very carefully later for adhesions which

may be producing the very same condition we had.

DR. D. O. KEARBEY (Indianapolis): The big thing Dr. McGinnis has brought home to me is outlining a procedure which combats the radical procedure that has been taught by Mosher and some of the other men, whereby they have left the impression that in all of these cases you extirpate all the ethmoids at all times.

Ethmoid surgery, to my way of thinking, is about the most dangerous thing that any surgeon can attempt, on account of the possibilities for complications that surround that region.

Dr. Loeb, in his analysis of the reports from men doing this line of work, showed that out of 350 deaths, practically half were due to this type of surgery, irrespective of any anesthesia. About half of them were meningitis, and the larger percentage of meningitis cases were following ethmoid surgery. So when Dr. McGinnis comes to us with this simple procedure, cautioning and advising that simpler procedures will help in a great many cases, it is worthy of our consideration.

One thing that he mentioned and which particularly appealed to me was leaving that normal ostium going into the frontal sinus, because, I dare say, most of us have been trying to get through with rasps. Granulation tissue soon fills in the curetted ostium and our operative procedure has failed of its purpose.

DR. E. MCGINNIS (closing): I work in a general hospital, the Presbyterian, where we are searching for focal infections. Most of the cases we have to deal with are in the general medical service.

Three or four years ago a patient was brought to our service who had symptoms of some asthmatic or bronchial chest upset. This patient was given various tests with different kinds of food and it was decided finally that he was subject to intoxication from ham. I found a marked deviation of the nasal septum to the left, shoving the middle turbinate closely against the lateral wall, and after mucosal shrinkage a large nasal polypus was found, and a nasal discharge that came from the middle meatus. I did a submucous resection and removed the polypus, draining the anterior ethmoid cells, and the man has had no more trouble in that respect. That case helped to better our position with the medical men in regard to nose surgery.

In a resume' of the cases at the County Hospital over a certain period of time, showing nasal accessory sinus involvement, Dr. Yerger found the anterior ethmoidal cells were most frequently involved, the antri next, the frontal next, posterior ethmoidal next, and the sphenoidal cells the least involved of any cases that came to postmortem. So most of our attack must be on the anterior ethmoidal cells. It is unnecessary to take out the middle turbinate plate or the ethmoid cells

in any case except that of malignancy. Most of these infected cases will get well with one or more drainage procedures.

The point I make about after treatment is that I do not treat them at all afterwards. I do drainage and let them alone. Have them take brisk walks every day in the open air, but never put in a probe or wipe out the ethmoid region.

My idea is that in the nose we have one type of infection, probably the staphylococcus; in the tonsil, another, and from the type you can make your diagnosis. If you have an acute arthritis it does not come from the nasal accessory sinus, but probably from tonsillitis or some focal infection where the streptococcus viridans or hemolyticus is present.

THE FREQUENCY OF THYMIC HYPERPLASIA IN TOXIC AND NON-TOXIC GOITERS*

ALFRED S. GIORDANO, M.D.

SOUTH BEND

DIRECTOR OF THE SOUTH BEND MEDICAL
LABORATORY

The thymus has for many years excited the interest of clinicians and investigators. For nearly a century the literature has been filled with discussions concerning the anatomy, physiology and pathology of the gland. More recently the discussion has been revived on account of the gland having been found hypertrophied in Basedow disease or exophthalmic goiter.

It is with this point in view that I have reviewed the literature and at the same time report my observations from a study of 288 cases of toxic and non-toxic goiters that came to autopsy at the Mayo Clinic from 1914 to 1922¹, with a typical case report illustrating the role that the hyperplastic thymus may play in some instances.

The association of an enlarged thymus with Graves' disease was first described by Markham¹ in 1858. Soon after Mobius, Weigert, Spencer² and others recorded similar observations, but they all interpreted it as casual coincidence. Schitzler³ in 1894 was the first to attach any importance to these observations. He reported a similar case and pointed out that in all probability the hyperplastic thymus was responsible for the death. Bonnet⁴ in 1899 reviewed the literature and collected 28 post-operative cases of exophthalmic goiter that died soon after operation and had associated a persistent hyperplastic thymus. Similar reports were soon made by Hansemann⁵, Gierke⁶, Monkelberg⁷ and others. Finally Capelle⁸ in 1908 placed the question within the surgical field by reporting a series of 60 necropsies performed on patients that had died with Basedow disease. Of

*Presented before the Section on Medicine of the Indiana State Medical Association at the Terre Haute Session, September, 1923.

(1) From the Department of Pathologic Anatomy, the Mayo Clinic, H. E. Robertson, Director.

these that had succumbed from intercurrent diseases the thymus was found hyperplastic in 44 percent of the cases; of those that died from the disease itself the thymus was found hyperplastic in 83 percent and of those that died soon after operation the gland was found hyperplastic in 92 percent of the cases. This report gave rise to great interest among the surgeons, particularly Garre' and Von Haberer in Europe, Halstead, Crotti and C. H. Mayo in America. A few years later Matti⁹ collected 133 cases in which 98 or 75 percent were complicated by hyperplastic thymus.

Hart¹⁰ in 1908 suggested that the abnormal activity of the thymus might be responsible for a clinical picture similar to that of Basedow disease. This conclusion was based upon the observation at necropsy of a man with symptoms of Basedow disease in whom there was found an abnormally large thymus while the thyroid gland showed no gross or microscopic pathologic changes. The thymus of this individual when transplanted into the peritoneal cavity of guinea pigs proved to be extremely toxic, while a similar transplantation of a calf thymus gave rise to no symptoms. Thus he concluded that in a persisting thymus are stored toxic substances which enter the blood as an internal secretion and give rise to symptoms similar to those associated with hyperplastic thyroid gland. He also agrees with Svehla that hyperthymic function may produce similar cardiac changes as hyperthyroidism and advanced the following theory: "The persistence and hyperplasia of the thymus causes a functional hyperplasia of the thyroid for the purpose of destroying the toxic products of metabolism originating in the thymus." Later Hart¹¹ again expressed similar views, strengthened by the good results that followed thymectomy without thyroidectomy, and the animal experiments of Bircher, who claimed to have produced in dogs, exophthalmos, tremor, tachycardia, and lymphocytosis by implanting the persisting thymus obtained from a case of exophthalmic goiter in the peritoneal cavity of dogs. Crotti¹² repeated Bircher's experiments several times although he was unable to obtain the symptoms described by him with the same intensity, yet he noted that the cardinal symptoms were moderately developed. In my own experiments I have never noted any changes in the experimental animal either by engrafting the thymus gland removed from exophthalmic goiter patients soon after death or by injecting an emulsion of the gland. Hart further states that the characteristic lymphocytosis described by Kocher in exophthalmic goiter is due to the influence of the hyperplastic thymus and this may be a pathognomonic sign of thymic hyperplasia, as he found that the lymphocyte count is increased by the injection of emulsified thymus, especially in exophthalmic goiter. Finally he concludes that there exists three types of Basedow disease—a pure thyrogenetic, a pure thymogenetic, and a

thymo-thyrogenetic, which has for its primary origin a pre-existing abnormally large thymus that later may influence hyperplasia in the thyroid gland.

The fallacy of this conclusion is evident when we consider the possibility that Hart was dealing with a patient having what Plummer¹³ has clinically classified as adenomatous goiter with hyperthyroidism. Pathologically it is well known that the thyroid gland in these cases does not contain the diffuse hypertrophy and hyperplasia of the follicles so typical of the true exophthalmic goiters. These patients, as shown in Table 1, do have associated hyperplastic thymus as frequently and to as a great extent as the exophthalmic goiter. Furthermore, an exact reduplication of hyperthyroidism as associated with adenomatous goiters can be produced experimentally by the administration of thyroxin. On the other hand the removal of the proliferating adenomatous tissue completely cures patients with hyperthyroidism. All of these evidences strongly suggest that the thymus plays little or no part in the production of the constitutional symptoms of toxic goiters.

In this series I have included the 100 cases reported by Blackford¹⁴ and Frehley and reclassified them according to the normal variation of the gland weight with age, as given by Hammar, and further have divided the goiters according to the clinical classification of Plummer, namely: Exophthalmic goiter, adenomatous goiter with hyperthyroidism, adenomatous goiter without hyperthyroidism. Pathologically the first group is characterized by diffuse parenchymatous hypertrophy and hyperplasia. The follicles are lined with high columnar epithelium and contain little or no colloid; the second group consists of nodular adenomatous goiters containing large amounts of colloid which, according to Wilson¹⁵, exhibits different staining qualities. He also has found in the second group that by careful search, scattered islands of gland with follicles lined by high cuboidal or columnar epithelium. These areas of hypertrophy and hyperplasia are found either within the adenomas, outside of the adenomas, or in both. In a small percentage of this group I have been unable to demonstrate these changes and it may be possible that the thyroidectomy was done during the period of regression in which the hyperplastic parenchyma undergoes involution changes as I have shown in a previous study on post-ligation¹⁶ exophthalmic goiters, consequently the hypertrophied follicles cannot be recognized. The third group are the adenomatous goiters in which the epithelium lining the follicles is of low cuboidal type.

The relative frequency of hyperplastic thymus with goiters is shown in Table 1. Analysis of this table reveals some interesting facts, namely, that non-toxic goiters, in this series at least, are not associated with hyperplastic thymus. The hyperplastic thymus is almost just as frequent

in adenomatous goiters with hyperthyroidism as in exophthalmic goiters and further the influence of age is practically negligible as to frequency or as to actual weight of the gland. In fact, some of the largest hyperplastic glands were found in patients past the fifth decade.

In comparing these figures of the relative frequency of hyperplastic thymus in exophthalmic goiters with those reported by Capelle, Matti, and others, my figures are much lower. But an analysis of these cases with special reference to factors that may cause involution of the thymus has revealed that a considerable number of these cases in which the thymus was found in complete involution were associated with superimposed chronic and acute infections. The following summary of the causes of death will illustrate this point:

Of the 139 cases with pneumonia absent and hyperplastic thymus present, pulmonary embolus occurred twice; apoplexy once and status thymico-lymphaticus once.

In summarizing the causes of death of the 233 cases, comprising the exophthalmic goiters and the adenomatous goiter with hyperthyroidism, the thymus was found hyperplastic in 146 or 62 percent and not hyperplastic or atrophic in 87 or 38 percent of the cases. One hundred thirty-nine or 95 percent of the patients that died as a result of toxic goiters had associated hyperplastic thymus without any superimposed acute or chronic disease. The remaining 7 or 10 percent had associated pneumonia which developed from 2 to 4 days before death. Of the 87 or 38 percent of the cases of toxic goiters in which the thymus was

TABLE I.
Relative Frequency of Hyperplastic Thymus in Exophthalmic Goiter, Adenomatous Goiters with Hyperthyroidism and Adenomatous Goiters Without Hyperthyroidism.

Thymus Hyperplasia in Exophthalmic Goiters			Thymic Hyperplasia in Adenomatous Goiters with Hyperthyroidism				Thymic Hyperplasia in Adenomatous Goiters Without Hyperthyroidism			
Age	No. of Cases	Thymus Present	Average Wt. of Thymus	Age	No. of Cases	Thymus Present	Average Wt. of Thymus	Age	No. of Cases	Thymus Present
10-20	14	12	64	10-20	1	1	92	10-20	3	0
21-30	43	33	40	21-30	2	1	54	21-30	3	0
31-40	41	28	30	31-40	4	2	53	31-40	6	0
41-50	57	35	37	41-50	18	9	30	41-50	9	0
51-60	19	9	25	51-60	18	10	54	51-60	22	0
61-70	6	2	81	61-70	10	4	30	61-70	11	0
Total	180	119			53	27			55	0
Percent		66				50				0

CAUSES OF DEATH

Relation of the cause of death to the presence or absence of the thymus gland in Exophthalmic and Adenomatous Goiters with Hyperthyroidism:

Pneumonia present and hyperplastic thymus absent	69
Pneumonia present and hyperplastic thymus present	7
Pneumonia absent and hyperplastic thymus present	139
Pneumonia absent and hyperplastic thymus absent	5
Septicemia present and hyperplastic thymus absent	1
Inanation present and hyperplastic thymus absent	9
Cirrhosis of liver present and hyperplastic thymus absent	1
Chronic nephritis with anasarca present and hyperplastic thymus absent	2

found atrophic or not hyperplastic, 69 or 80 percent died of pneumonia from seven days or more after its onset. Ten or 11 percent had associated superimposed chronic wasting diseases and in only 8 or 9 percent no definite accountable cause for absence of hyperplastic thymus could be ascertained. Therefore, if we are to accept Hammar's¹³ view that chronic and acute infections cause a rapid involution of the thymus, it would be fair to assume that in the cases of toxic goiter that died as a result of superimposed acute or chronic diseases, in which no hyperplastic thymus was found, the thymus was in all probability hyperplastic at some period during the course of the disease in all except 9 percent of the cases. Thus bringing the total frequency of hyperplastic thymus in this series of toxic goiters up to 91 percent.

The question that presents itself is, what is the meaning of hyperplastic thymus in toxic goiters and does its presence exert beneficial or deleterious effects?

There is considerable evidence that in certain clinical pictures the hyperplastic thymus is the causative factor as in so-called thymic asthma, since this condition is improved either by x-rays or surgery.

The method by which the hyperplastic thymus exerts its influence is believed by some to be mechanical and by others through its excessive or perverted secretion, while still others maintain that the increased size of the organ is coincidental, bearing no causal relationship to the noted disturbances.

The mechanical theory was revived and advanced by Virchow in 1862 and since then many important contributions have appeared in the literature. In 1910 C. H. Mayo and McGrath made a complete review of the thymic question and added new evidence to the mechanic theory with the result of two complete cures that followed partial thymectomy in two children with symptoms of thymic pressure. This has been more recently emphasized by Crotti and others. In view of this theory the following case is of interest:

Case 391799, Mrs. W. A. S., age 41, came to the clinic complaining of increasing loss of weight and strength in spite of ravenous appetite. Later developed palpitation and tachycardia and had been confined to bed at various intervals. Examination revealed poorly nourished female having lost about 28 pounds in weight. The skin was hyperemic and moist. The thyroid gland was enlarged and nodular. No bruit or thrills were present over the gland. There was present a

tremor ($\ddot{11}$) and loss of quadriceps power ($\ddot{111}$) graded upon the basis of IV. The x-ray plate of the chest revealed only a slight shadow in the upper portion of the manubrium sterni interpreted as thyroid gland. The basal metabolic rate was 46 and 44 percent after rest in bed. The systolic blood pressure 142 and diastolic pressure 82 and the pulse rate 95 per minute. A diagnosis of adenomatous goiter with hyperthyroidism was made and partial thyroidectomy was performed. At about 2 a. m. on the following morning of the operation, the patient complained of dyspnea although there were no objective evidences for the complaint. The bandages were removed and slight hematoma was noted which was not considered of importance. The wound was redressed and the patient was soon asleep. The following morning the patient again complained of choking spells and it was decided to evacuate the hematoma. No anesthesia was required, the wound was opened and as the surgeon evacuated the clot the patient gave a few gasps and stopped breathing. Tracheotomy was performed immediately and breathing restored. However, after breathing was restored it would remain unchanged even though the tracheotomy tube was closed, showing there was no obstruction to the trachea. The patient returned to her room

in fair condition. About an hour later another severe attack of dyspnea occurred. The upper extremities and face were cyanosed and the pulse was 180. Suction through the tracheal tube revealed no mucous in the trachea. Oxygen was administered, the cyanosis immediately improved and the pulse returned to 120. In about two hours later the patient was taken with another similar attack and in spite of all efforts expired.

At necropsy the wound was perfectly clean and free from blood clots. On removing the sternum there was found a large hyperplastic thymus occupying the superior and anterior portion of the inferior mediastinal space. The gland extended from the cervical notch of the manubrium sterni to the distal third of the pericardial sac. Laterally it was covered by lung tissue. In the region of the cervical notch of the manubrium sterni the gland covered the common carotid arteries and the internal jugular veins on both sides. In the thorax it covered the arch of the aorta, ascending and descending part of the aorta, the innominate veins and artery, the pulmonary arteries, the superior vena cava, the right auricle and portion of the inferior vena cava. The middle half of the left innominate vein was practically inclosed in thymic tissue. By blunt dissection the capsule of the gland was separated from the pericardium and the vagus nerve on each side was found underneath the gland as well as the roots of the lungs. On section the gland tissue was very firm and lobulated. The capsule of the gland was slightly infiltrated with blood, giving it a diffuse purplish hue.

The heart weighed 250 grams. The myocardium was firm. The leaflets of the mitral valve were thickened and nodular while the corresponding cordæ tendinæ and papillary muscles were definitely sclerosed and shortened. The trachea and bronchi presented no evidence of pressure and the lumina were free from mucous or foreign bodies. Both inferior laryngeal nerves were free throughout their course. The remaining organs presented no noteworthy lesions. Microscopic examination of the heart revealed definite focal fibrosis. In the capsular region of the thymus there were found well-established inflammatory reaction characterized by edema and polymorpho-nuclear infiltration.

How are we to explain the pathogenesis of this peculiar dyspnea? Crotti points out that because of the connection of the thymus to the thyroid gland by the thyrothymic ligament, the thymus will follow the up-and-down movements of the trachea and larynx during the acts of swallowing, coughing and dyspnea. Consequently a hyperplastic thymus comes up like a wedge between the spinal column and the manubrium sterni, thus compressing the underlying structure of the trachea. This pressure is further increased with hyperextension of the head due to the projection

of the vertebræ forward, so to diminish its antero-posterior diameter. However, this is not the only factor, as this case illustrates. There is still another possible factor, namely the pressure produced upon the blood flow to the heart by pressure upon the auricles, superior and inferior vena cava, pulmonary vessels and innominate veins as shown in drawings and photograph.

The destruction of the thyrothymic ligament at the time of thyroidectomy probably allowed the thymus to fall farther down into the thorax and cause a greater obstruction to the return flow of blood to the heart from the superior and inferior vena cava, thus accounting for the peculiar symptoms and the excessive increase of heart rate, for during the attacks the pulse could not be counted. Under such mechanic conditions, the blood that passed through the lungs was oxygenated but probably there was an insufficient amount of blood passing to the heart and consequently there resulted a general anoxemia while the heart was acting like a semi-empty pump. This is particularly suggestive by the patient's symptom of shortness of breath with no objective evidence of dyspnea or marked cyanosis. So that in this case at least mechanic obstruction of the return blood flow to the heart seems more probable than the other explanation based upon reflex vagus stimulation or obstruction by pressure upon the trachea. Likewise this case does not support the various theories of physiologic action of the gland. However, an important point which must be considered in these patients is the fact that we are dealing with individuals in whom there already has existed a parenchymatous degeneration of the vital organs, particularly the heart, as was found in this case, a definite myocarditis with mitral stenosis; consequently the reserve power of this organ must necessarily have been markedly reduced so that the addition of an increased load upon the circulation and with a possible anoxemia of the myocardium, led rapidly to a fatal end.

CONCLUSIONS

1. The thymus is invariably hyperplastic in toxic goiters and not in non-toxic goiters of this series.
2. Age is not an important factor to the frequency of degree of hyperplasia of the thymus gland.
3. Thymic hyperplasia is the result rather than the cause of toxic goiters in the majority of the cases as shown by the curative effects of partial thyroidectomy, especially in toxic adenoma.
4. That the fatal cases of toxic goiters are due to the associated hyperplastic thymus has not been proven. But it may be a very important contributory factor to the cause of death.

BIBLIOGRAPHY

1. Markham: Trans. Path. Soc. of London, 1858, ix, p. 163.
2. Quoted by Lenormant: Les Thymus des Basedowiens. Journal de Chirurgie, 1912, Vol. 9, p. 273.
3. Quoted by Lenormant.
4. Bonnet, L. M.: Les fonctions du thymus d'après la

- physiologie, Gaz. de Hop. Paris, 1899, lxxii, pp. 1321-1353.
5. Hansemann, D.: Berlin klin wochenschr., 1905, xlii (Fest 44a) p. 65. Schildruse und thymus beider Basedowchen Krankheit.
6. Gierke, E.: Munch. med. Wochenschr., 1907, liv, pp. 775-777. Die persistenz und hypertrophie der thymusdruse bei Basedowischer Krankheit.
7. Monckeberg: Persistierend hypertrophische Thymus bei Morbus Basedowii, Deutsch med. Wochenschr., 1907, xxxiii, p. 1278.
8. Capelle, W.: Ueber die beziehungen der thymus zum Morbus Basedow. Beitr. zu klin. chir. Tubing, 1908, lviii, pp. 353-393.
9. Matti: Berlin klin. Wochenschr., 1914, li, p. 1365.
10. Hart, C.: Ueber thymus persistens und apoplektiformen Thymus tod nebst Bemerkungen der Thymus persistens zur Beseden Krankheit. Munchen med. Wochenschr. 1908, iv., 688-744.
11. Hart, C.: Thymus persistens und thymus hyper-plasie. Centralblatt, f. d. Genzgeb. d. med. u. chir. Jena 1909, xii, pp. 321-369-401-449.
12. Crotti, A.: Thyroid and Thymus, Phil. Lea & Febiger, 1918, 552.
13. Plummer, H. S.: Personal communication.
14. Blackford, J. M., and Freleigh, W.: The thymus in adults with special reference to man. Collected papers of the Mayo Clinic, 1916, pp. 507-512.
15. Wilson, L. B.: Personal communication.
16. Giordano, A. S., and Caylor, H. D.: Histological study of the effect of ligation of the Thyroid vessels in Exophthalmic Goiter, Surg. Gyn. and Ob. 1923, vol. xlvii, pp. 75-80.

DISCUSSION

DR. MARCUS W. LYON (South Bend): The paper is based on a large series of actual facts and observations and I think it is impossible to vary from the author's conclusions in regard to the frequency of hyperplastic thymus and also as to the probable role it plays in toxic goiters. Until the large thymus is suspected in these cases and treatment is instituted to reduce the size of the thymus, it seems to me that we are unable to arrive at any very decided conclusion in regard to the part it plays in causing death. The author seems rather inclined to believe that a hyperplastic thymus plays an important role as the cause of death in certain of these cases. Just what that role is, as he states, is not certain. In the cases he recited it seemed to be a mechanical one. It is perfectly easy in children to reduce the size of the thymus by x-ray therapy. I think it would be well to subject one-half of these cases to x-ray therapy and allow the other half to go on with treatment as heretofore. In that way I believe we can arrive at a definite conclusion as to whether or not the thymus plays the part the author suspects it does in these cases.

THE ASSOCIATION OF PARA-NASAL SINUS INFECTION WITH BRONCHO-PULMONARY DISEASE*

R. E. REPASS, M. D.
INDIANAPOLIS

Although association of para-nasal sinus infection with broncho-pulmonary disease is a well-established fact, I feel convinced that the frequency of this association is far greater than is generally recognized and the role that sinus infection plays as an etiological factor in diseases of the lower respiratory tract cannot be overestimated.

*Presented before the Section on Ophthalmology and Otolaryngology of the Indiana State Medical Association at the Terre Haute Session, September, 1923.

Until of comparatively recent date this subject was but little discussed in the current literature, and aside from the observations of a few French writers, Colonel Rist and Colonel Sergeant in particular, and the publications of Mullin and Ryder, Webb and Gilbert, there is little to be found prior to their observations.

It is interesting to note that even in recent textbooks very little, if any, mention is made of the association between focal infections of the head and the diseases of the lower respiratory organ. Nowhere have I found it considered as a clinical entity.

McPherson, in Osler's System of Medicine, mentions the relative frequency of brain abscess complicating bronchiectasis, but makes no inference of associated sinus disease, or of this being a probable exciting cause of the intracranial complication.

Cabot in his Physical Diagnosis makes this interesting and suggestive statement relative to bronchitis: "The more we study bronchitis, the more it vanishes from sight as a clinical entity."

"Acute bronchitis is fast turning into bronchopneumonia, and chronic bronchitis is being recognized as chronic pulmonary edema, due to cardiac weakness. It seems doubtful that chronic bronchitis exists at all except as a minor element in other diseases."

The latter statement seems especially significant since the co-existence of upper and lower respiratory infections is being so frequently demonstrated clinically.

In 1921 Webb and Gilbert (A. M. A., March 12, 1921) cited the observations of Colonel Rist and Colonel Sergeant among the supposedly tubercular soldiers. They found after re-examination including Roentgen ray examination of the sinuses, that in one-third of the cases a mistaken diagnosis had been made and the majority of the mistakes were made in men suffering from chronic bronchitis associated with infections of the nose or nasal sinuses. This condition became known to them as false tuberculosis.

The life of the soldiers, especially those in the trenches, exposed as they were to damp and cold, exhausted by long continued physical and nervous strain, constituted an ideal environment for the development of these diseases.

Stimulated by their experience with the French army surgeons, Webb and Gilbert began routine examinations of the accessory nasal sinuses in all their chest cases when repeated examination of the sputum proved negative for tubercle bacilli. Their results coincided with the findings of the French writers. Few cases of chronic bronchitis or bronchiectasis were found in which chronic infection of the sinuses was not demonstrated.

Bilateral empyema of the maxillary sinuses was by far most frequently encountered.

Modes of Infection. The exact manner in which infection reached the lower respiratory organs was a matter of considerable speculation for some time. However, the results of experimentation along this line seem to prove conclusively that the lungs are infected by two distinct routes, namely (1) through the lymph vascular system and (2) by direct inhalation of infected discharge.

Andre' in 1905 and Grunwald in 1910 reported their experiments of injecting the lymphatics of the antra in cadavers. The fluid used passed out of the antral orifice, extending to most of the mucosa of the middle fossæ of the nose, the upper portion of the inferior turbinate, the middle turbinate, ethmoids, sphenoids and frontal sinus, passing backward to the pharynx and ending about the orifices of the eustachian tubes.

Their results would seem to prove the anatomical lymphatic continuity of the whole lymph vascular system of the sinuses and nasal cavities. However, these few experiments carried on as they were under artificial conditions of pressure and on the dead subject, naturally depreciated the drawing of clinical conclusions and are no sure criterion as to normal functioning of the lymph current in the living.

In 1919 Mullin published the first reports of his and Ryder's researches to establish the lymphatic connection from sinuses and neighboring regions to the bronchi and lungs. Their experimental work consisted chiefly of injection and inoculation of the antra and frontal sinuses of living animals.

They found the antra of rabbit and frontal sinus of cats were relatively large as compared with the skull as a whole and the anatomical arrangement very similar to that in man. The lymph nodes although less numerous are more constant in their arrangement and correspond very closely in regional distribution to those in man.

The injection of India ink was made in the cavities and cellular spaces by hypodermic needle without pressure while the animals were under anesthesia, and after various periods of time the animals were chloroformed and the tissues and lymph nodes examined microscopically. The conclusions as a result of their experiments are as follows:

(1) The lymphatic absorption from the antra is by way of the submaxillary and internal jugular nodes, the lymph ducts, the great veins, the right heart and the lungs.

Substances reaching the lungs may, of course, pass on to the left heart, the general circulation, and also may be taken up by the pulmonary lymphatics and reach the bronchial nodes.

(2) Absorption from the tissues of the face in the antrum region and hard palate is by the same route.

(3) The subparotid and retrosternal nodes may sometimes be reached by absorption from the antrum and neighboring tissues.

(4) Lymphatic drainage is widely regional, anastomosis from node to node and from side to side is free, so that it is not always possible to fix on a single node or group of nodes as the certain point of election of metastasis from a given region.

(5) In respect to lymphatic function as well as anatomically, the mucous membrane of the nasal fossæ and accessory sinuses is a continuous whole and infection at any point can probably be conveyed by the lymphatics to practically any other point.

(6) Lymphatics penetrate the posterior wall of the frontal sinuses, and substances under exceptional conditions of pressure may be carried to the dura, over the frontal lobe of the brain. The usual course, however, is the same as that of the antrum.

(7) Drainage of the sinuses into the upper air passages renders the bronchi and lungs liable to infection by inhalation, and this factor may be as important as metastasis in accounting for the clinical association of sinus disease with broncho-pulmonary disease, though in non-drainage cases it seems to be excluded.

In view of this seemingly well-established anatomical and functional lymphatic relationship of the upper and lower respiratory tracts, borne out by abundant clinical evidence of its existence, the assumption may be made that sinus disease may be a frequent source of infection and reinfection of the lungs, and it seems advisable that all cases of subacute and chronic respiratory disease, including bronchial asthma, in which the etiological factors are in doubt, even if a co-existent tuberculosis should exist, should have a painstaking examination for a possible focal infection in the sinuses or upper air passages.

Not infrequently the cases will give no definite symptoms of local disease to arouse suspicion, and unless special inquiry is made relative to the symptoms of head disease, many of the cases will be overlooked. Many cases without pain, headache, nasal discharge or the common catarrhal symptoms will, when questioned, acknowledge suggestive symptoms. Mental lassitude, inability to concentrate the mind, forgetfulness, a heavy, tired, drawing feeling over the bridge of the nose, visual disturbances, a tendency to catch cold on the least provocation, stuffy noses, etc., are symptoms which should always lead to a most thorough investigation of the nasal fossæ and associated cavities, for favorable results from appropriate treatment in chest cases, secondary to focal infections of the head is in a degree proportionate to the promptness in which the diagnosis is made and treatment instituted.

I wish to report very briefly three cases which will represent a class most frequently encountered.

Case 1—Mrs. J., age 58, had for several years frequent attacks of bronchitis, associated with

bronchial asthma, loss of weight, and circulatory disturbances. Examination of the nasal cavities revealed right maxillary sinus empyema, an enormous anterior ethmoid cell filled with pus, and a hypertrophic middle turbinate undergoing polypoid degeneration. All symptoms have disappeared with the eradication of the focal infection.

Case 2—Miss B., age 23, had a harsh, dry cough for several months. Tuberculosis was greatly feared by patient and family. Sputum always negative. No history of tuberculosis in immediate or distant relatives. Her family physician reported moist rales in the base of left lung. She claimed to be subject to frequent colds and troubled with crusts forming in the epipharynx. She would dislodge one of these hard, tough masses about the size of a dime every two or three days. There was no objective evidence of nasal pathology. Her sinuses to transillumination were unusually well illuminated. After several weeks, these symptoms not having cleared up, I decided to wash the left antrum and found it partially filled with a thick, greenish pus. Her cough promptly cleared up after cure of the sinus disease.

Case 3—Mr. R. W., age 20, seen first March 12, 1923. He gave a history of having two rather mild attacks of bronchopneumonia in 1922. Since October, 1922, he has not been free from a cold. Supraorbital headache and persistent dry cough, especially annoying at night. He was examined at Saranac by Dr. Brown in 1922 and again in February, 1923, for possible pulmonary tuberculosis. No evidence of tuberculosis was reported. He was several pounds under weight, had lost much time from his college work and displayed a marked indisposition to close mental application. Roentgen ray examination showed bilateral maxillary sinus infection, other sinuses apparently normal. Irrigation of sinuses demonstrated empyema of both antra. Preliminary drainage was followed by prompt improvement of all symptoms. He completed his last college semester with the best grades of his college career. To my knowledge no other treatment has been instituted.

I cite these cases merely to emphasize the importance of rhinological study of the common bronchopulmonary cases.

They are illustrative of a great mass of people similarly affected, and should impress us with the importance of strict vigilance in efforts at diagnosis, for on early diagnosis of focal infections, as casual factors in lung disease, depends, to a great extent, successful treatment and ultimate cure.

REFERENCES

- Gilbert and Webb—(1) *Rist and Sergeant*: cited by Gilbert and Webb, A. M. A., March 12, 1921.
Mullin and Ryder—(2) *Amr. Review of T. B.*, Vol. IV, No. 9, November, 1920.
Mullin—*Trans. Amr. Laryngological, Rhinological and Otolological Soc.*, 1920, page 488.
Mullin—*Annals Otology, Rhinology and Laryngology*, September, 1921.

Andre—(3) Contribution a l'etude des lymphatiques du nez des fosses nasales. These de Paris, 1905.

Grunwald—(4) Die lymphgefäße des Nebenhöhlen der Nase Archiv für Laryngol und Rhinol, XXX, 11 p. 1-4, Berlin. 1910.

DISCUSSION

DR. J. W. WRIGHT (Indianapolis): I think all of us doing special work recognize the importance of sinus infections and the fact that repeated infections in the nose and throat probably have some chronic condition back of them.

I was very much interested in the manner in which this infection could be transmitted to the bronchi.

A few years ago I read a paper on sinus infection and attempted to trace the association between bronchial infections and sinus infections following Colonel Martin's outline of the lymphatic system, and the explanation is there without any doubt, when we stop to consider how richly supplied the entire respiratory tract is with lymph nodes.

In my limited experience I have observed two things: First, in the acute ethmoid infections there is always more or less tracheal or bronchial irritation. In the chronic stages, my observation has been that the percentage is about fifty-fifty, ethmoid and antrum. I heartily agree with him in one thing that he has stated, that all chest cases should have a proper examination of the sinuses. That may be the seat of a lot of additional disturbance.

THE MEDICAL PROFESSION AND THE PEOPLE*

IRVIN ARTHUR, M.D.
PATOKA

To the observer of things medical it is evident that there is something wrong with the relation existing between the medical profession and the people of this country. The blame is being shifted from one side to the other without a satisfactory solution of the question. Medical practitioners blame the medical schools, while medical school men are inclined to think that practitioners are not doing their full duty.

It is generally conceded that the medical profession is losing its grip upon the people. Our medical laws are being repudiated by trial juries and state legislators refuse to enact more stringent laws to regulate the healing art. The people of California, by popular vote, have refused to recognize the medical practice act of that State.

Fifteen years ago Gibson County, Indiana, had forty-five medical doctors serving the entire population of thirty thousand people. Today there are only thirty licensed physicians in the county. More than a dozen irregular (unlicensed) healers have taken the place of those who have dropped out. According to statistics there are now in the United States one-fifth as many of these irregular

healers as there are qualified physicians. The number of irregular healers is greater than their importance, yet they would not exist if they did not fill a kind of need.

In the light of this we wonder whether our profession has been fulfilling its entire mission. Established physicians tell us that their business is as good as it ever was and they have nothing to worry about. But we notice that the ranks are being filled by irregular healers instead of by men from our medical schools.

This naturally leads our attention to medical education for a solution to this problem. It has been said truthfully that our medical schools are unfitting men to practice medicine at the bedside. This being true, it follows that they are defeating the main purpose of the schools, which is the development of general practitioners of medicine.

It is said that in Germany medical education has been conducted as a university function in the true sense of the word. The English schools are largely vocational in their methods and spirit and attack in a very direct way the development of the general practitioner of medicine. Naturally our earlier schools were patterned after the English methods of teaching, but in the last twenty years they have been swinging toward the German plan and the pendulum has swung so far that it now smacks very much of a "made in Germany" product.

This does not suit the people. They are not dissatisfied because it comes from Germany, for they do not know much about that. They are now demanding a practical education in the public schools and they will not be satisfied with anything short of this in medical education. We have been trying to force this pure scientific program on them for twenty years and we see now that we are making an utter failure.

"Medicine" has been defined as knowledge culled from science, used in the treatment and prevention of disease. According to this definition it is difficult to find much of the teaching of medicine in the first two years of the curriculum. Pure science is being taught and many of the men conducting these courses are not capable of culling these facts from science. They have not gone into the medical course themselves and know very little of what is used there. Furthermore, too many of them are not concerned with medical knowledge but are conducting their work for the sole purpose of building up their science.

They boast of giving these medical students a scientific foundation and mental discipline. They tell them that if they dig deep enough and long enough in these laboratories they will finally find the key that unlocks all of the problems in the treatment of disease. But they have been digging for twenty years and they have not yet found it. Dr. William Osler has told us that it is not there. He has said that the foundation of the treatment of disease is to be found in psychology, which

*Published by request of the members of the Gibson County Medical Society.

is something entirely different from what these medical scientists have been working on for many years. The irregular healers have found this out and they have been attracting the attention of the people by treating them, in a very crude way, along the lines of psychotherapy. They are developing rapidly and the people are encouraging and protecting them in their work.

This indicates that the people of this country are demanding of the medical profession something more than shaking up test tubes and looking through microscopes. The thing that they demand most of all when they are sick is service, and if they cannot get it from the medical profession they will get it somewhere else.

George Van Ness Dearborn has had this to say about our medical schools: "Although the great power of suggestion has been recognized from the earliest human times and the powerful influence of mind on the body somewhat understood for centuries, the medical schools obviously have in general belied their high privilege of first studying and then teaching the relations and mutual dependence of body and mind. They have neglected psychology. It has been the characteristic of modern scientific medicine that it has integrated inadequately, and therefore been duly narrow (in this respect) in its range—these two facts indeed being the mutual results of the plain over-guidance by the tradition of materialism.

"The practical results of this trend has been a

regrettable, not to say surprising, slowness in medical education's recognition that the practitioner invariably should know the broader rudiments of psychology, have systematic acquaintance with the foundation principles of the relation of body and mind; and above all be forced to realize, against the old traditional materialistic prejudice, that every patient is mind quite as importantly as body."

CONCLUSIONS

We should have only applied physical science taught in our undergraduate medical schools along with a well graded course in applied psychology.

All this work should be conducted by men who have gone through the course and who have the medical profession at heart.

When this change has been made we will have a course that the people will respect and defend. Courts will no longer repudiate our medical laws. State legislators will see to it that all healers will be required to take this course, and the people of each state will refuse to allow any class of healers to impose their special methods upon them until they have complied with this necessary preparation.

Medical practitioners say that all they ask is that all healers shall meet the same educational requirements. This will be brought about when our medical curriculum meets only the necessary requirements of all healers.

UNCOMPENSATED ALKALOSIS IN ENCEPHALITIS

George A. Harrop and Robert F. Loeb, New York (*Journal A. M. A.*, Aug. 11, 1923), report a case of epidemic (lethargic) encephalitis with a disturbance of the respiratory mechanism producing a prolonged, extremely rapid, shallow type of breathing. The condition of the acid-base equilibrium which was found apparently has not previously been described as occurring in this condition. Analysis of the arterial blood shows: Arterial oxygen content, 21.29 percent by volume; arterial oxygen capacity, 26.8; arterial oxygen saturation, 79.6; arterial carbon dioxid content, 24.8; and arterial carbon dioxid capacity (whole blood), 39.6 percent by volume (equilibrated at 40 mm. CO₂ tension). The arterial carbon dioxid capacity (serum) is 40.9 percent by volume (equilibrated at 40 mm. CO₂ tension). The arterial blood pH is 7.59. Calcium is 9.8 mg. per hundred cubic centimeters; sodium, 404 mg.; potassium, 16.9 mg., and chlorid, 3.66 gm. per liter (estimated as Cl₂). The analyses of the arterial blood thus reveal the presence of an abnormally high pH associated with a low arterial carbon dioxid content proportionately much lower than the plasma bicarbonate capacity (Van Dyke), which itself is lower than normal. It is evident that the condition is one of "uncompen-

sated carbon dioxid deficit," due to the rapid, shallow breathing, which has produced an abnormally great pulmonary carbon dioxid excretion, with an increase in the ratio $\text{BHCO}_3 : \text{H}_2\text{CO}_3$, and therefore in the pH.

PREGNANCY AFTER INTERPOSITION OF THE UTERUS

Although a successful procedure for prolapse, interposition of the uterus presents a decided hazard to future pregnancy, as is shown by the cases reported by Irving F. Stein, Chicago (*Journal A. M. A.*, Aug. 11, 1923). Because of the fixation of the anterior wall and fundus of the uterus, only the posterior wall is available for development during pregnancy, and at term the cervical canal is perpendicular to the axis of the inlet. Thus, the pelvic inlet is obstructed by the undeveloped anterior wall of the uterus, and labor results in a tendency to flatten the cervical canal from side to side instead of obliterating it from above downward. With the cervix in this position, rendering spontaneous labor impossible, and the anterior uterine wall fixed to the anterior vagina there is only one rational procedure for the treatment of advanced pregnancy, namely, abdominal hysterotomy.

THE JOURNAL of the

Indiana State Medical Association

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

Office of Publication, 406 W. Berry St., Ft. Wayne, Ind.

NOVEMBER, 1923

EDITORIALS

INCREASING RESPECT FOR OUR CODE OF ETHICS

At present there is a faint glimmer of a hope that something radical is to be done in the way of increasing our respect for the code of ethics and the ordinary rules of honesty in the practice of medicine. It is a well known fact that the American College of Surgeons requires those who are accepted as Fellows to sign a declaration in which they obligate themselves to make their conduct conform to rules of ethics which are considered of the utmost importance in the fair dealing of every physician with the public as well as with his confreres. Mentioned especially in the obligation is the promise not to engage in fee dividing or the paying of commissions in any guise whatsoever in connection with the handling of cases referred by others. It is recognized that a few Fellows of the College have not been true to their pledge and are following practices that are not in keeping with the highest and best ethics of the profession, and this refers more particularly to the practice of fee dividing. The ultimate result has been that while but a very small percentage of the Fellows of the American College of Surgeons are guilty of fee dividing, yet the College through these Judases has had to suffer from its traducers who, guilty themselves, are pleased at the opportunity of dragging every one else down to their level if possible.

There have been many things to consider in building up the American College of Surgeons, and while a great constructive work is being done without the rank and file of the profession knowing much about it, yet the question of building up and maintaining high ethical standards has not been lost sight of, and quite recently a movement has been put on foot to correct some of the abuses, and in particular stamp out fee dividing among the very limited number of the Fellows who are guilty of practicing it. In fact, in all probability those men upon whom even the slightest suspicion falls at the present time may be asked to give an accounting, and definitely prove innocence if they are not to be expelled from the College. That the elimination of fee dividing soon will be of more importance than ever before is further evidenced by the fact that the American College of Physicians, analogous to the American College

of Surgeons, is contemplating having a pledge that is equally as stringent as the pledge made by the Fellows of the American College of Surgeons. In other words, there is no reason why the surgeons should be "the goat" in efforts to clean up the medical profession of unethical and dishonest practices. If the surgeon is guilty of giving or offering fees, the internist is equally guilty in asking or accepting fees as a **division** of the amount received for the specific services rendered by the surgeon. It is evident that a very large proportion of the better class of men doing internal medicine will want to be identified with the American College of Physicians, and if they sign a pledge, similar to that signed by the surgeons, to the effect that they will not accept fees or commissions in connection with any cases referred or with which they are associated, and the pledge is maintained as it no doubt will be, we can see the end of fee dividing except among renegades in the medical profession, and it will not be long before the latter will be ostracized by the profession and public alike. When this day comes, all members of the medical profession will be placed upon a higher ethical and moral plane, and secure greater confidence and respect of the public, for the reason that every self respecting physician will consider it a duty to render the highest type of service to his patrons that it is possible to give. He will make a proper estimate of the value of those services and charge his patrons accordingly, and the patrons will learn to appreciate the value of those services and will be quite willing to remunerate doctors according to their desserts. There is not and never has been any justifiable reason for the so-called division of fees except a reason that has its birth in a mercenary desire for gain. The practice is an iniquitous one, as even the fee dividers themselves admit, and the public suffers. It will be fortunate if an awakening conscience on the part of even a small minority of the medical profession as a whole compels greater adherence to ordinary fair and honorable rules of conduct.

NEED OF CO-OPERATION IN MEDICAL ACTIVITIES

In Indiana there is a great lack of co-operation of various enterprises that are of interest to or directly connected with the practice of medicine, and the Indiana State Medical Association, the representative organization of the medical profession of the State, ought to be in close touch with the State Board of Health, the Board of Medical Registration and Examination, the Medical department of the State University, the State hospitals, and many other enterprises concerned in medical work with which the medical profession is identified in one way or another. We are strongly of the opinion that it is time that a general consolidation of effort be effected to bring about the best obtainable results for each of these

agencies. The advice, good will, and the active support of the medical profession is worth obtaining. Without such co-operation as suggested there will be failure to accomplish the best results, and a division of opinion as to ways and means to be provided for the maintenance and usefulness of very worthy enterprises that should have the united support of all concerned.

As a suggestion it may be well to consider a closer affiliation between the committee on Administration of the Indiana State Medical Association and the enterprises already mentioned. Furthermore, the rank and file of the medical profession of the State should be in closer contact with the activities of these various agencies, and to that end THE JOURNAL can be of signal service by carrying departments devoted to the aims and accomplishments of the medical department of Indiana University, the State Board of Health, the State Board of Medical Registration and Examination, and the various State hospitals. It even would redound to the credit of all concerned if these interests, through officers or committees, would meet in a general session for the discussion of policies that have to do with the success of each and every one of them.

HOSPITAL STANDARDIZATION

Standardization of hospitals means absolutely nothing unless every hospital is compelled to comply with the same rules before being approved. There are quite a number of hospitals in Indiana that meet all of the requirements laid down by the American College of Surgeons, and some others that though having been approved are not deserving of that distinction and are open to criticism if all reports are true. Apparently some of the inspectors sent to examine and report upon these low standard hospitals either have been a little lax in the performance of their duties, or have been influenced in some way to pass a favorable opinion when the same was not justified. Complaint has been made to THE JOURNAL that two or three prominent hospitals in Indiana, the names of which appear upon the approved list, are inadequate as to laboratory facilities and pay little or no attention to other details which go to make up an approved hospital.

The size of a hospital or the amount of work done in it is not a criterion. The whole question of hospital standardization and with it placing the stamp of approval upon hospitals resolves itself into one in which all hospitals meeting the standard must have adequate equipment, system necessary for good work, and a staff of not only competent physicians and nurses, but one that is free from fee dividing and other forms of objectionable commercialism. No discrimination should be made in the approval of hospitals, whether they are large or small, located in city or town, or how they are affiliated, providing they are adequately equipped, ethically conducted, and

competently served. We are under the impression that a re-inspection of the hospitals in Indiana will result in the elimination of some hospitals from the present approved list, and it is time that such action should be taken.

A. M. A. SERVICE

Beginning with October the *American Medical Association Bulletin* is sent to all of the Fellows. *The Bulletin* contains a great deal of useful information concerning the work of the Association. We feel sure that not many of the Fellows know how much and how varied is the work done by the Association in the interests of scientific advancement and for the economic benefit of not only the profession as a whole, but the individual members thereof as well. While it may be possible, though not probable, that all of the Fellows of the Association have read the October number of *The Bulletin*, yet we doubt if many of them appreciate some of the service that can be given the individual Fellows by the various bureaus of the A. M. A. Therefore, we feel that we are perfectly justified in reprinting from the October *Bulletin* an article entitled the "Bureaus of the A. M. A. and Some of the Services That They Are Prepared to Do for the Fellows," by Dr. W. A. Pusey, of Chicago, president-elect of the American Medical Association. Our particular reason for publishing this article is that we want the large number of the members of the Indiana State Medical Association who are *not* Fellows of the A. M. A., and they number about 1,800, to realize just what Fellowship in the A. M. A. means to them as individuals. Many doctors have an idea that about the only thing gained by Fellowship in the A. M. A. is to receive the *Journal of the A. M. A.* and the privilege of attending the annual sessions. They do not appreciate the fact that aside from the co-operative spirit they should manifest in the interests of organized medicine, they are losing some of the benefits that may come to them directly as individuals, and that if procured in any other way than through the A. M. A. would cost them many times the cost of Fellowship. Therefore, we ask each and every one of the members of the Indiana State Medical Association to read the article by Dr. Pusey which is as follows:

I have had occasion to go to the offices of the American Medical Association certainly once or twice a week, for more than a decade. Nevertheless, I have constantly been discovering new things it is prepared to do in the regular course of work for Fellows of the Association. If one who is in continuous touch with the office, like myself, does not know the opportunities for help that it offers, it seems likely that the Fellows in general know even less of this and, through ignorance, are failing to utilize the opportunities for help which are theirs for the asking. It has occurred to me, therefore, that it might be worth while to call attention to this subject, not that the information is not available in the publications of the Association, but because most Fellows are likely to fail to acquaint themselves with it.

A GREAT INFORMATION BUREAU

The Association is the greatest information bureau on medical affairs that exists. For a generation now it has been accumulating data on medicine and medical matters, and it has all of its information on file, available for Fellows of the Association. This accumulation of information is systematically divided among the following bureaus: The Library; Bureau of Legal Medicine and Legislation; Bureau of Investigation and Propaganda Department; Council on Pharmacy and Chemistry, and Council on Medical Education and Hospitals.

There was, until this year, the Council on Health and Public Instruction, but this has been succeeded by the Bureau of Health and Public Instruction. This bureau will carry on the work formerly done by the council, except that pertaining to legislation, and will assist in the publication of *Hygeia* under the direction of the Board of Trustees.

THE LIBRARY

The library has charge primarily of the bibliography of the world's medical literature. It stands ready to do, and actually does do, for a considerable number of the Fellows of the Association, two very useful things: 1. It furnishes lists of references on any subject, or subjects, in medicine to any Fellow on request. 2. It lends to Fellows, on request, for a limited time and on the payment of postage, foreign medical journals.

These two services supplement each other: By the first, one learns where to find the subject one is looking for; by the other, one is helped to obtain the journals which are most likely otherwise to be inaccessible. Incidentally, in this connection (although I am not conducting a subscription campaign for *The Journal*), if one has a file of *The Journal* for a few years back, he is almost certain to find in this file, in abstract at least, all of the references that are given him. The man who wants to get a bibliography together—to look up a subject—and who has not been able to get a proper lead on it, and who fails to avail himself of this service, is overlooking the greatest possible labor-saving aid in a laborious job.

THE BUREAU OF LEGAL MEDICINE AND LEGISLATION

In the recently organized Bureau of Legal Medicine and Legislation there is available practically complete information concerning medical legislation. Specifically, a Fellow can, on application, obtain from this bureau information on the following subjects: 1. The laws of the various states on public health and the practice of medicine. 2. Laws and legal decisions relating to the prevention of disease. 3. Laws and decisions concerning isolation and quarantine. 4. Laws and decisions concerning the income tax and the internal revenue acts as they concern the physician. 5. Campaigns against animal experimentation and vaccination and vivisection.

BUREAU OF INVESTIGATION

The Bureau of Investigation is also known as the Propaganda Department. It would have a more enlightening title if it were called the Bureau of Medical Frauds. This is the department that has for nearly twenty years been accumulating information about medical frauds of all sorts; and, most important of all, publishing it. The department began its work with the gentlemen who, twenty years ago, with their proprietary medicines—for the medical profession first, and later (as soon as they had the profession committed) for the public—were assuming the function, through their detail men, of teaching physicians how to practice medicine.

The part of this work dealing with proprietaries was later turned over to the Council on Pharmacy and Chemistry and its chemical laboratory. For many years, the Bureau of Investigation has given attention to "patent" medicines and the quack doctor. The vast material it has accumulated is a mixture of tragedy, comedy, absurdity and crookedness. It is not only valuable to the Association, but it is also a valuable resource for the individual Fellow when he is in need of information about

some particular fraud. More than 100,000 items are covered in the index in this department. Information is available on almost any quack method, medicine or individual: at one extreme, the cancer cures, the liquor and opium cures, and the tuberculosis cures; at the other, the bald head frauds and the cosmetic nostrums; the innumerable fraudulent mechanical devices; the advertising quack or institute—information concerning all of these are on file to enable the Fellow to make an effective effort to save his patients from these pirates.

The literature of this bureau—and it has many of the important frauds covered in pamphlets—has always been, to my mind, the sporting column of the Association. It and the Council on Pharmacy and Chemistry are the fighting departments of the Association. They have carried the frauds into the open, when carrying them into the open was dangerous business. They have finally established the fact that the public and the medical profession are entitled to knowledge of crookedness in medical things, regardless of the strength of the interests which are damaged by making this knowledge public. It has taken continuous courage to do this job, but the job has been done. No one was more surprised when the Association undertook to invade this domain of the fraudulent than the proprietary interests that fooled the public and those that fooled the medical profession, unless it was the physicians themselves, who discovered how they had been fooled. Now there are hardly any reputable manufacturers who do not accept the dictates of the Council on Pharmacy as inevitable, if not desirable; and they have come to the view that the acceptance of their remedies by the council is the most valuable asset that these preparations can have.

One ought to keep in touch with the work on frauds of both these bureaus, if for no other reason than to stimulate his admiration for the Association as an active force.

COUNCIL ON PHARMACY AND CHEMISTRY

The Council on Pharmacy and Chemistry is now giving its attention to the remedial agents, chemical and physical, which are offered to the profession. The scope of its work I have already referred to. From it the Fellow can get the essential, unbiased facts about proprietary remedies, new or old. In other words, it is an almost unabridged thesaurus of nonofficial remedies, about most of which little responsible authoritative information is anywhere else readily available. Its service is invaluable to the Fellow who wants to know the composition of nonofficial remedies before he uses them.

COUNCIL ON MEDICAL EDUCATION AND HOSPITALS

The Council on Medical Education and Hospitals began its work by accumulating information concerning medical schools. It has gone to the point where it has accumulated: (1) Almost complete information on the subject of medical schools; (2) a complete file of individual information concerning all of the licensed physicians of the United States and of medical students, and (3) extensive information regarding the hospitals of the country.

All of this information is available, on application, to the Fellows of the Association. Specifically, this council is ready, in order to serve the Fellows:

1. To give information concerning the laws and board rulings on medical education, licensure and reciprocity throughout the United States and in other civilized countries.
2. To give the ratings of medical schools and specific information bearing on the choice of medical schools.
3. To give the ratings of and specific information bearing on the choice of postgraduate medical schools.
4. To furnish statistics on medical education.
5. To furnish statistics on the supply and distribution of physicians and information in regard to excess or lack of physicians in any particular locality.
6. To furnish information concerning any of the 654 hospitals which have been accepted for intern training.
7. To advise hospital boards, and especially their

medical staffs, concerning requirements for a hospital to be accepted for intern training.

8. To give information concerning special hospitals and institutions, such as convalescent homes and rest homes; homes for the aged, incurable, blind and deaf, and for backward and mentally deficient children; and sanitariums for tuberculosis and other special diseases.

9. To advise as to hospital facilities in any part of the country, including specific information about the existing hospitals.

10. To furnish information about the planning and building of hospitals, of office buildings for physicians, of physicians' residences, of group practice buildings, of medical society buildings and of other buildings for physicians' use.

11. To furnish information concerning dispensaries and group clinics and their problems.

12. To furnish information concerning medical cults and miscellaneous and irregular medical schools, hospitals and other institutions.

The mass of information available to the profession, and, incidentally, to the reputable public, at the office of the Association is, for the most part, nowhere else available. It is a storehouse of knowledge ready for the asking; but, as a source of information it is of no use to the individual unless he knows of its existence and avails himself of it when he needs it. It is, in fact, very much like an unabridged dictionary—or the Medical Directory of the A. M. A.—the extent and value of whose information is only realized by those who have the habit of using it.

The Association belongs to its Fellows; those who fail to utilize its facilities are not getting full return from their property.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

DOCTOR, are you reading our advertising pages? We are proud of the interesting announcements that are being made by our advertisers, and we are especially proud of the fact that these announcements are from trustworthy firms who not only deserve but should have your patronage.

A QUACK doctor associated with the United Specialists, going under the name of D. D. Hays, has been arrested at Hobart for practicing medicine without a license as also for questionable practices.

Let the good work go on, but why stop with the United Specialists who possess the M. D. degree even though quacks? Why not prosecute the chiroquacktors who are the worst offenders? At present we compliment those deluders of the public by throwing baskets of roses their way.

THE newspapers announce that "Professor Lorenz has returned to this country to resume his thank offering for services in relieving the starving children of Vienna". This sort of newspaper propaganda gets a little tiresome when from various sources it is learned that each and every one of the appearances of Professor Lorenz in this country has resulted in a very large pecuniary gain for the astute professor who evidently is not averse to profiting from the newspaper advertising that is given him under the specious plea that he is here as a philanthropist. In reality it looks very much as though Professor Lorenz is here to fatten his formerly depleted purse, and evidence seems to indicate that he is not meeting with failure in that respect.

THE Bureau of Standards of the United States Department of Commerce is attempting to secure the co-operation of publishers in using a uniform size of page in the publication of books, periodicals, magazines, pamphlets, etc. This effort at standardization is bound to result in great economy, for it not only means a saving in paper but saving in machinery and the additional help that is necessary as a direct result of the present chaotic condition in which there is no uniformity in size. It may be of interest to our readers to know that already the state medical journals with few exceptions, have united upon a policy of having one size of page, thus making it possible for an interchange of advertising plates, including the electrotypes used by advertisers, and effecting other economies associated with uniformity and standardization.

THE New York State Department of Health asks for more hospital accommodations for crippled children. At present New York State has but one hospital for cripples, located at Haberstroh, 41 miles from New York City. Although this hospital is equipped to give treatment to any type of cripple, it practically has had to limit its activities to the care of patients with tuberculosis of the spine and joints and to those requiring surgical operation. Only children from two to sixteen years of age are accepted in this hospital and there are a great number of crippled adults needing such hospital treatment. If a large and wealthy state like New York, and containing New York City, the metropolis of the Nation, has such meager accommodations for crippled children, how thankful we should be that Indiana is providing the Riley Memorial Hospital which should be ample to care for and give treatment to any type of cripple within the State.

IN INDIANA a doctor is not permitted to obtain alcoholic beverages on prescription and it is almost impossible to obtain it from any source, even through bootleggers. In some of the neighboring states a limited quantity of good liquor may be

NOVEMBER, 1923

obtained on prescription. In New York City neither a prescription nor a "pull" with a restaurant or friendly revenue officer is necessary in order to obtain all the alcoholic beverages desired. Prohibition is decidedly successful in a good portion of the middle western states, but there is sufficient evidence to indicate that it is considerable of a failure in the East; and New York City, except for the spasmodic raids of revenue officers to appease the clamorings of prohibition fanatics, is wet enough to satisfy any reasonable person who believes in being able to quench a thirst for alcoholic beverages. Let's have some uniformity in this question of liquor control. If it is to be dry in Indiana, then why not dry in New York?

GONORRHOEA is known to be common in the South Sea Islands, and oftentimes is transmitted to the eyes. In fact during certain seasons of the year, purulent ophthalmia occurs in epidemic form. However, there has been some difference of opinion as to whether the ophthalmia was really gonorrheal in type or not. Quite recently D. Hunt, Medical Corps of the United States Navy, has studied this type of conjunctivitis and reports that out of several hundred smears taken from South Sea Island cases of purulent conjunctivitis a small gram negative diplococcus was found in every instance. Cultures were made which showed that the infection was morphologically and culturally the same. The conclusions were that the conjunctivitis is due to a gram negative diplococcus, and judging from the fact that gonorrhoea formerly was so prevalent in the South Sea Islands, and the results of the experiments made, it is believed that the gram negative diplococcus that causes the conjunctivitis is an attenuated form of the gonorrhoeal diplococcus.

THE city of Chicago has been singularly blessed during the last few months by the annual conventions of all the variegated assortment of peculiar practitioners. There have been conventions of naturopathy, of medico-physical research and of physical therapeutics, and the allied practitioners and what not are in the offing. Strangely, when one comes to consult the programs of these organizations, one discovers, freely intermingled with those practitioners who diagnose and treat disease by colored lights, spinal adjustments, so-called autohemic therapy and the "electronic reactions" of Abrams, as well as by soul science, medico-radio-vibrations and zonotherapy, the names of a few physicians whose names heretofore have been associated only with decent medicine. When a program is predominantly devoted to the delusions of the enthusiast and the vagaries of the quack, physicians with reputations to lose might consider well whether or not they care to associate with such a group.—*four. A. M. A.*, Oct. 13, 1923.

EVERY now and then we receive some so-called scientific articles bearing upon the food value of certain well-advertised commercial products and generally calling attention to a particular trademark brand. A few months ago we were furnished with considerable data concerning the purity and the food value of a particular brand of coffee which was produced under a certain climate and in a certain soil, and was reputed to have virtues not found in any other product on the market. Now comes a government report in which real coffee of every kind and description is reported as not only having food value, but possessing nerve stimulating virtues of an innocuous character which readily places coffee in the first rank as a substitute for alcoholic beverages without producing any ill effects on the part of the consumer nor showing any tendency to create habit. All of which should be very pleasing news to the growers and distributors of coffee, and especially so in the light of what is known to be a very largely increased demand for the product since the Volstead law went into effect.

THOSE surgeons who occasionally leave gauze sponges, scissors, forceps, or other things in the abdominal cavity and then later have to reopen the abdomen in order to remove the missing articles, or perhaps suffer from the unpleasantness of being dragged into court on a malpractice charge due to the fact that a confrere has found the missing articles, will be interested in the proceedings of the Medical Association of the Isthmian Canal zone, published by the health department of the Panama Canal, in which appears a report of a case in which a gauze sponge remained in the abdominal cavity for fourteen years following an operation for chronic appendicitis. The symptoms and signs of an early ectopic gestation were simulated, leading to operation and the discovery of the sponge which was found to be encapsulated. A few days following the operation the patient gave birth to a fetus six or eight weeks old. Except for the disturbance accompanying the pregnancy it is quite possible that the encapsulated gauze sponge might have remained indefinitely without producing untoward symptoms.

AN INTERESTING committee report of the Indiana Section of the American Chemical Society on the electronic reactions of Abrams is published in the official *Journal of the Indiana Tuberculosis Association*. From this report we quote as follows:

"We have been reminded, as we studied this machine and methods employed, of the fantastic creations produced by the minds of the inmates of our hospitals for the insane. We believe the whole creation to be the product of an uninformed, self-contained intellect, or a sly creation designed to deceive for the purpose of gain. In taking up this matter we have dealt with it without prejudice and without favor, and have only a feeling of sympathy for those who have been deluded and deceived by this insidious and stupendous fraud of recent years."

In other words, it is another way of saying that the Abrams so-called discoveries and treatments are rank frauds; and yet we notice that there are some Indiana doctors who openly advertise that they are using the Abrams methods. It is our notion that county medical societies in Indiana who harbor within their membership doctors who use or claim to use the Abrams' methods and treatments are justified in expelling such men from membership on the ground that they are utilizing a recognized fraud for the purpose of securing gain.

THE present governor of Indiana seems to have piled up a lot of trouble for himself, and the end apparently is far off. His successor is not apt to be of his political stripe, for while the signs point to a change of administration anyway after the next election, it seems to be a certainty that the many irregularities in the present governor's conduct will not be forgotten in the next gubernatorial contest and a representative of the opposing political party is very apt to win. This leads us to remind the doctors of Indiana that one of our number, defeated for the governorship at the last election, probably will be a nominee in the coming election. Without any discussion of his political affiliations or whether or not we are identified with and support the same political party, we feel disposed to say that a finer gentleman has not run for political office in Indiana, and certainly never in the history of the State have we had a candidate for governor who was so heart and soul in sympathy with all of the aims and purposes of the medical profession. If he becomes governor of Indiana he can be depended upon to both encourage and defend all rational enterprises fostered by the regular medical profession.

WHEN one contemplates the agencies for the destruction of life and property developed largely as a result of the last war, it seems ridiculous for any nation to consider for a moment the question of engaging in war. When we think of poison gases that are one thousand times more deadly than those used in the last war, a small quantity of which dropped from an airplane could destroy every living thing for a radius of several miles—the possibilities of distributing death and destruction through germs and bacteria in flasks that can be dropped into reservoirs, and thus poison the water supply of cities and towns—the improvement in aircraft that has gone on steadily since the war—the control of vessels by wireless, and, in fact, the improvement in many other life-destroying agencies, we are facing facts that point unerringly to the possibility of wiping out civilization completely unless some means is adopted whereby war is made impossible. Disarmament is the hope of the world and the United States, now occupying the foremost position in

the world, ought to be the nation to take the initiative in bringing about the desired change in the present threatening conditions when preparations for war were never keener.

THE girl who diets until she is sick enough to be placed in the hospital, all for the purpose of making herself thin and willowy and in keeping with what for a few years has been the prevailing fashion, will have to mend her ways, for now the edict has gone forth by no less an authority than Ziegfeld, the judge of the female human form divine, that the beautiful American girl and the one whose shapely form men delight to gaze upon, must be plump. Therefore, the plump girls are assuming a look of happiness, and the thin girls who can not get plump through the medium of food are hunting the stores that supply pads and other accessories for rounding out the angles. But, seriously, the pernicious habit practiced by some young "flappers" in carrying diet and starvation to excess in order to lose weight has produced some serious results, and no matter what has brought about fashion's decree that plump girls are decidedly the ones to be preferred, it will be a fortunate thing if the unreasonable extent to which diet has found a place in the lives of the average American girl is abandoned. As a matter of fact, girls should be taught that whether thick or thin, tall or short, good looking or homely, they require and are better off if they have well balanced rations.

A LONG suffering public has been awaiting this precious gem of information which we copy from the "*Chiropractic Educator*," published and distributed gratuitously to the laity by the Palmer School of Chiropractic:

"It is as impossible for a headache or any other symptom to be present in the human body with the spine in perfect alignment as it is for darkness to express itself in the broad light of the shining sun; the two absolutely can not co-exist. Every individual who suffers from headaches owes it to himself to have the spine so aligned that disease can not exist, even though temporarily dormant.

What a botch of a job the good Lord made when he created so many human beings with crooked spines, and how flattered (?) he must be to have a lot of section hands, stable boys and janitors with small mental caliber and limited educational qualifications pass judgment on his work. We can account for so many crooked spines only by assuming that the malformation descends from the crooked rib taken from Adam, even though Eve is said to have been a perfect woman and a casual glance at the biblical pictures of her in her fig leaf full dress costume seems to lead us to the belief that her descendants started out with vertebrae in fairly good alignment. However, chiropractors have discovered something that the Creator, Eve, nor anyone else ever knew about, and though they cannot prove their claims, "What do we care!"

IN A CIRCULAR letter being sent broadcast by an Indiana chiropractor, the statement is made that every disease and every uncomfortable symptom in the human body is due to a lack of correct alignment of the human spine, a condition which chiropractic can correct. The unfortunate feature of this whole deluding and mercenary business is that there are enough credulous people in this world who will believe such rot, and feather the nests of the chiropractors who at best are an ignorant and mercenary lot.

Advertising of the kind that brings patrons to the circus or the vaudeville is what builds up the chiropractic business. The newspapers, if they told the truth, could suppress chiropractic. Better business bureaus, if they showed as much interest in suppressing quackery as they do in suppressing the sale of fake oil stocks, could put chiropractic out of business. A united medical profession, if it used its influence in the right channels, could put chiropractic out of business, for no one yet has seen false practices succeed when light is thrown upon them. The chiropractors in every populous community are spending thousands of dollars to educate the people concerning their irrational, inconsistent and positively dangerous theories. What is the medical profession doing to counteract this vicious propaganda? Echo answers "D— little."

THE United States Bureau of the Census is making a special effort to secure the co-operation of physicians in securing accurate vital statistics, and in this connection attention is called to the failure on the part of many physicians to give specific statements regarding the cause of death. As an aid a physician's pocket reference to the international list of causes of death may be secured for the asking. In this little book are entered the causes of death as based on the international classification, and a discussion of reasons why undesirable terms, such as heart failure, general debility, old age, convulsions, dropsy, croup, malnutrition, malignancy and some other terms which in reality are merely equivalent to "cause of death unknown," never should be used. The secretary of the Indiana State Board of Health is attempting to improve the Indiana records and statistics by soliciting the co-operation of all of the physicians in the State in improving upon the statements of the causes of death as given in death certificates, and to that end is distributing the physician's pocket reference book to each registered physician in the State. In this connection it may be well to add that except in those cases where it is possible to make a definite and accurate statement as to the cause of death, an autopsy should be secured if possible. In fact, from a scientific point of view, autopsies are quite necessary in all cases where exact pathology of the case that has led to a fatal termination is not known.

John Hughes and his wife, Elgie Hughes, of Elwood, have sued Emery B. Yingling and his wife, Bonnie Yingling, chiropractors at that place, for recovery of money paid them under assurance they could cure their boy, who had cross eyes. The complaint alleges fraud. It states that the plaintiffs visited the office of the defendants in May, 1921, taking their afflicted son with them. After examination they were assured by the Yinglings that they could cure the boy. The Yinglings told them it would require twelve treatments and would cost ten dollars a treatment. Instead of twelve treatments they had eighteen given the boy and paid the defendants \$180. The complaint alleges the boy was not benefited and suit is brought to have them refund the money.—*Anderson Herald*, October 24, 1923.

It occurs to us that it should be easy sailing to secure a verdict for the complainant in the above described case. In the first place chiropractors are not licensed to practice medicine; in the second place they failed, for very easily explained reasons, to secure the results promised and for which payment was made; and in the third place, it is the rankest kind of swindling to promise improvement in a case of cross eyes from any sort of *chiroquacktic* manipulations or adjustments. It may take the public a long time to learn that the diagnosis of disease and the proper treatment of the same requires more knowledge than obtained in a *chiroquacktic* school or pseudomedical college, and that for the most part chiropractic manipulation is the rankest kind of fraud, but eventually the truth will permeate the minds of the laity. In the meantime many unfortunates like the Hughes family, of Elwood, will pay the penalty, not only in cold cash but in blasted hopes.

IN THIS number of THE JOURNAL we print the full page advertising announcement concerning automobile insurance for the members of the Indiana State Medical Association as endorsed by the Association at the recent Terre Haute session. We desire to call the attention of the members to the fact that for two years the Automobile Committee, authorized by the House of Delegates, has been investigating the subject of automobile insurance with a view to securing cheaper rates for physicians, believing that as preferred risks physicians are entitled to better rates than given by the so-called old line insurance companies. The committee investigated the responsibility and standing of numerous companies which offered cheaper insurance rates, only to find that the majority of them possess little or no tangible financial responsibility, or have a reputation for unfair dealings with policy holders. Finally, after thorough investigation, it was decided to recommend the company whose announcement appears in the advertising pages of this number of THE JOURNAL. Suffice it to say that this insurance is offered to the members of the Association under a *bona fide* agreement that cost of protection will be at least 25% lower than prevailing rates. The committee feels satisfied that all policy holders will be cared for in a very satisfactory way and that the Association will have

no cause for regret in recommending the company for patronage. Automobile insurance at best is expensive, and yet an automobile owner can scarcely afford to be without it. Therefore it should be a source of satisfaction to physicians to know that an opportunity now is offered for a decided saving in one of the costs of the upkeep of an automobile.

PERHAPS no class of people is more interested in good roads than doctors. Probably no doctor offered objection to the two-cent per gallon gasoline tax when promised that all of the money derived from that source would be turned over to the highway commission for the maintenance and construction of roads. However, as we pointed out at the time, we had little faith in the promises made, and offered the comment that in all probability some of the funds raised by taxing automobilists would be turned in to the general fund, and that is exactly what is happening at the present time. In fact, the general fund has been borrowing from the highway commission, and the general report is that there is little intention of repaying the loan. If there is any one thing that this country needs more than another it is good roads, but good roads and their maintenance will cost an enormous amount of money. While it is quite true that good roads benefit everybody, and perhaps everybody should contribute to their maintenance and support, yet in reality the gasoline tax, almost wholly wrung from the automobile owners, was intended to do the work, and would do the work if not tampered with by politicians who are ever ready to misapply any fund to meet their peculiar ideas of justice. It is nothing short of piracy for many of the state authorities to rob the fund intended for the construction and maintenance of good roads, in order to meet expenses, extravagant or otherwise, which have been provided for and should be covered by other forms of general taxation. All automobilists are interested in this proposition, but doctors especially are interested for the reason that they use the roads in all seasons and under all conditions, and as they contribute a considerable portion to the tax they have a right to be heard in protest against the robbing of the fund.

THE United States Postmaster-General, our esteemed ex-Senator New, is credited with having instituted great reforms, economy and improvement in the service. As a mere user of the mails, we perhaps have no right to complain, and yet we fail to understand the hokus pokus which justifies any such eulogistic praise of our postal service as we oftentimes hear from political sources. As an instance of just how swift the service is, we call attention to the fact that copies of *THE JOURNAL*, all properly addressed, with street numbers and all of the other requirements for safe delivery, actually have been one week in de-

livery after being turned over to Uncle Sam's swift (?) mail service. The editor of *THE JOURNAL* mailed a letter in Chicago which under even a slow service should have been delivered at its destination 150 miles away within twenty-four hours; in fact, there is no reason why it should not have been delivered inside of six hours, but in reality it reached its destination in seventy-two hours. A letter mailed in New York on Tuesday reached its destination, less than 1,000 miles away, on Saturday. Five letters addressed to business men in the downtown district of our home city were delivered forty-eight hours after being mailed. Such instances are common occurrences with all business men who seem to have come to the conclusion that procrastination on the part of the postal employees is to be taken as a matter of course.

Our very highly respected Indiana citizen who now occupies the position of Postmaster-General really can make a name for himself by improving the service that he represents, but until he does improve it he is not deserving of the eulogistic praise that is being accorded him by some political friends. Mere economy in the post office department is not the only thing desired by the American people. They want economy, but they also want efficiency along with it.

STEINMETZ, the electrical wizard of the General Electric Company, is dead. He was an invaluable man to the General Electric Company, and his inventions and discoveries undoubtedly netted the corporation for which he worked hundreds of thousands of dollars. It is said that he never placed a price upon his services and drew no salary, but was given sufficient money for his simple needs. He left no estate and if he left any heirs it rests with the corporation for which he worked as to whether they receive anything as the result of his work. His whole life was wrapped up in his profession and apparently he cared nothing for gain. He has done much to promote electrical development and thus has been of signal service to humanity. There are many such, and the world is better in consequence, but we often wonder if they are appreciated, and we know that they seldom get their just desserts during life. In fact, their passing away leaves but a slight vacancy in the current events, which is soon filled, and often they are entirely forgotten; yet there is this in a life of service that prompts others to emulate their example: There is a personal satisfaction in the accomplishment of things worth while, and a life is misspent that has not been devoted to productiveness of some kind or other, even if it is no more than creating happiness for others. We may reckon that "we are only poor mortals after all," but as poor mortals we each and every one of us owe it to ourselves to have done something that makes the world better for our having lived in it. Steinmetz

left no heritage in lands, stocks, bonds or money, but he certainly left the world better for having lived in it. His life and work could be an example to many of this generation who, when they think of doing anything worth while, put the question, "What is there in it for me?" Some are content with mere sordid gain, or the accumulation of riches which they can not take with them when they die, while others are content in doing well, with little or no thought of monetary compensation. In the end the greatest reward that man can secure is the self-satisfaction in doing the best that is in him and securing the approbation of his fellow men. Probably no one has ever obtained more satisfaction out of life than did Steinmetz, and though he died poor in this world's goods, he was satisfied with his life and accomplishments.

DEATHS

JACOB BUEHLER, M.D., aged 71 years, died at his home in Indianapolis, October 2. Dr. Buehler graduated from the Medical College of Indiana, Indianapolis, in 1891.

L. P. COLLINS, M.D., of Logansport, age 36 years, died October 16. Dr. Collins was a member of the Cook County Medical Society of Illinois, and was a Fellow of the American Medical Association. He graduated from the Indiana University School of Medicine, in 1911.

LUKE P. V. WILLIAMS, M.D., of Whiteland, was buried October 3. Dr. Williams graduated from the Kentucky School of Medicine, Louisville, in 1889. He was a member of the Johnson County Medical Society, the Indiana State Medical Association and the American Medical Association.

CHARLES CLEMENCEAU F. NIESCHANG, M.D., of Fort Wayne, died November 3. Dr. Nieschang graduated from the Fort Wayne College of Medicine in 1882. He was a member of the Allen County Medical Society, the Indiana State Medical Association, and was a Fellow of the American Medical Association.

JOHN P. WARD, M.D., of Vevay, died October 1, at the age of 63 years. Dr. Ward was a member of the Switzerland County Medical Society, the Indiana State Medical Association, and was a Fellow of the American Medical Association. Dr. Ward graduated from the Medical College of Ohio, Cincinnati, in 1883.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

THE regular meeting of the Chicago Orthopedic Club was held November 9 at 30 North Michigan Avenue.

THE Gibson County Medical Society held a meeting at the office of Dr. A. H. Rhoads, Princeton, on October 29.

THE Chicago Laryngological and Otological Society held a meeting at the Auditorium Hotel, Chicago, October 1.

THE American Medical Editor's Association held its fifty-fourth annual meeting at the Auditorium Hotel, Chicago, October 25 and 26.

DR. FRANKLIN W. CREGOR, of Indianapolis, has been appointed a member of the judicial council of the American Medical Association.

THE Northeastern Indiana Academy of Medicine held a meeting at Garrett, Ind., October 11. A clinic was held at the Sacred Heart Hospital.

THE Huntington County Medical Society held a meeting Tuesday, October 2, at Huntington. Dr. Charles Rothschild, of Fort Wayne, presented a paper.

A BRONZE tablet purchased by the community of Rushville in honor of the memory of Dr. William Laughlin, first citizen of Rush county, was unveiled September 27.

THE Putnam County Hospital Association entertained the Putnam County Medical Society, October 17, with a dinner given in the dining room of the hospital. Dr. R. C. Ottinger, of Indianapolis, presented a paper on "Cancer."

THE Muncie Academy of Medicine held a meeting at the Hotel Roberts, Muncie, October 12. Dr. J. F. Baldwin, of Columbus, Ohio, presented a paper on "The Great Quacks in History and the Lessons They Have Taught Us."

DR. CLEON NAFE, superintendent of the Indianapolis City Hospital, and Miss Eunice Katherine Shouse, of Lexington, Ky., were married Saturday, October 20. They will make their home at 1312 North Alabama Street, Indianapolis.

EIGHTY physicians attended the semi-annual meeting of the Elkhart County Medical Society held October 11, at Elkhart. Thomas W. Watkins, of Northwestern University, presented a

paper on "Infections; with Special Reference to Pelvic Infections."

THE Seventh District Medical Society held a meeting at Danville, October 30. Papers were presented by Drs. O. T. Scamahorn, R. W. Terhune, J. D. Hendricks, Amos Carter, and Murray Hadley. A special program both for afternoon and evening was arranged for the ladies.

THE New York Laryngological Society is celebrating its fiftieth anniversary November 15, in New York City. In connection with the celebration there will be an exhibition representing the important contributions made to the progress of Laryngology in the city of New York.

THE first fall meeting of the Boone County Medical Society was held October 2 at Lebanon. Dr. James O. Ritchey, of Indianapolis, presented a paper on "The Infectious Element of Nephritis" and Dr. Wendell D. Little, of Indianapolis, presented a paper on "Blood Transfusion; the Superiority of the Paraffined Tube."

THE Chicago Ophthalmological Society held its regular meeting October 22 in the Rose Room of the Hotel Sherman, Chicago. Papers were presented by Dr. M. H. Cottle, on "Synechia of the Vitreous of the Cornea"; Drs. H. S. Gradle and Elsa Eisendrath, on "Time Reactions of the Pupil," and Dr. C. W. Hawley, on "After Results of Strabismus Operations."

THE Indiana State Nurses' Association held its twenty-first annual meeting at Evansville for three days, beginning October 4. The meeting was held in conjunction with the annual meeting of the Indiana State League of Nursing Education. Caroline Gray, dean of the school of nursing at Western Reserve University, Cleveland, Ohio, was the principal speaker.

THE Eleventh Indiana Councilor District Medical Society held its thirtieth meeting at Logansport, October 18, at the Northern Indiana Hospital. Papers were presented by Drs. Carl Sawyer, of Marion, O., on "The Mental Patient and the General Practitioner"; Wilbur E. Post, Chicago, on "Eclampsia as Related to Disturbed Kidney Function," and W. Walters, Indianapolis, on "Insulin."

THE Eighth District Medical Society held a meeting at the Hotel Roberts, Muncie, October 26. During the afternoon session papers were presented by Drs. Edgar R. Hiatt, of Pennville; Henry W. Gante, of Anderson; Herbert Buckles, of Hartford City, and B. R. Kirklin, of Muncie. In the evening a paper on "The Management of Diabetes," was presented by Dr. R. T. Woodyatt, of Chicago.

THREE hundred sixty-two persons were killed in automobile accidents in Indiana during 1922. During the first eight months of 1923 two hundred ninety-four persons met death in automobile accidents. For the first eight months of 1922, there were two hundred twenty-four deaths due to this cause. The total number of deaths in Indiana in 1922 was 35,473. Total number of births in 1922, 63,464.

DR. SAMUEL E. SMITH, for the past 32 years medical superintendent of the Eastern Indiana Hospital for the Insane, at Richmond, has resigned his position to accept the newly created position of provost of Indiana University. He will serve in the capacity of a vice-president and executive assistant to President William Lowe Bryan. Dr. Smith will take up his new duties about December 1, with permanent residence in Indianapolis.

THE American Association for the Study and Cure of Cancer was organized October 12 in the New York Academy of Medicine. Over sixty charter members were enrolled from eighteen different states and some from outside countries. Dr. L. Duncan Bulkley was made president; Dr. Curtis Frank Classen, vice-president; Dr. A. Hirt Appel, secretary and treasurer. An executive committee of five was appointed. The next annual meeting will be held in Chicago during the meeting of the American Medical Association.

THE United States Civil Service Commission announces open competitive examination for Trained Nurse (psychiatric). The examination will be held throughout the country on **December 5**. It is to fill vacancies in the Panama Canal service. Competitors will be rated on subjects of anatomy and physiology, hygiene of the sick room, general nursing, surgical nursing, obstetrical nursing and training and experience in nursing. Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C., or the secretary of the Board of U. S. civil service examiners at the post office or custom house in any city.

IN addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Cheplin's Biological Laboratories:

Cheplin's B. Acidophilus Milk.

Lederle Antitoxin Laboratories:

Diphtheria Toxin Antitoxin Mixture (0.1L+)-
Lederle, 30 Cc. vials.

H. K. Mulford Company:

Diphtheria Antitoxin Standard-Mulford.

Diphtheria Antitoxin Superconcentrated - Mulford.

Parke, Davis & Company:
Antidysenteric Serum-P. D. & Co.
Protein Extracts Diagnostic—P. D. & Co.:
Colon Bacillus Protein Extract Diagnostic-P. D. & Co.; Gonococcus Protein Extract Diagnostic—P. D. & Co.; Micrococcus Catarhalis Protein Extract Diagnostic—P. D. & Co.; Pneumococcus, Type I, Protein Extract Diagnostic-P. D. & Co.; Pneumococcus, Type II, Protein Extract Diagnostic-P. D. & Co.; Pneumococcus, Type III, Protein Extract Diagnostic-P. D. & Co.; Pseudodiphtheria Bacillus Protein Extract Diagnostic-P. D. & Co.; Staphylococcus Albus Protein Extract Diagnostic-P. D. & Co.; Staphylococcus Aureus Protein Extract Diagnostic-P. D. & Co.; Staphylococcus Citreus Protein Extract Diagnostic-P. D. & Co.; Typhoid Bacillus Protein Extract Diagnostic-P. D. & Co.
Silver Nitrate in Capsules-P. D. & Co.

SOCIETY PROCEEDINGS

“LET’S GO—3000 MEMBERS FOR 1923”

To realize this, our President’s slogan for this year, it will be necessary for every county society to increase its membership over that of 1922.
The following list comprises the counties who already have done this, and it is hoped that in the succeeding numbers of THE JOURNAL, this list will grow until it includes every county society. If the secretary of any of the smaller county societies will demonstrate to Dr. Combs that his county society cannot show further accessions because of the fact that every eligible doctor is already a member, the name of this secretary will be placed at the head of the list.

County	Secretary
1. Adams	B. F. Beavers
2. Dubois	W. D. Bretz
3. Elkhart	S. T. Miller
4. Knox	C. E. Stone
5. Noble	S. E. Munk
6. Whitley	F. G. Grisier
7. Allen	D. D. Johnston
8. Boone	W. H. Spieth
9. Daviess-Martin	H. C. Wadsworth
10. Gibson	A. H. Rhodes
11. Rush	J. M. Lee
12. Shelby	F. E. Bass
13. Warrick	W. P. Ford
14. Floyd	P. H. Schoen
15. Fulton	A. E. Stinson
16. Huntington	M. G. Erehart
17. Monroe	F. H. Austin
18. Porter	C. H. Dewitt
19. Clinton	L. L. Harding
20. Howard	Florence Olmsted
21. Kosciusko	O. H. Richer
22. Lake	E. E. Evans
23. Marion	Wm. A. Doeppers
24. Posey	John Ranes
25. St. Joseph	R. B. Dugdale
26. Wayne	R. L. Hiatt

THE SEVENTH DISTRICT MEDICAL SOCIETY

The Seventh District Medical meeting was held at Danville, Tuesday, October 30, 1923. The attendance was large, and both the scientific and social program was enjoyed.
During the afternoon the scientific program was held in the auditorium of the Hendricks county courthouse:
President’s Address.....Dr. O. T. Scamahorn
A Plea for Some Old-Fashioned Remedies.....
.....Dr. R. W. Terhune
Protein Sensitivity in Hay Fever and Asthma.....
.....Dr. J. D. Hendricks
Tuberculosis.....Dr. Amos Carter
Limitations of Surgery in the Treatment of Appendiceal Peritonitis.....Dr. Murray H. Hadley
The new officers elected were: President, Dr. A. L.

Marshall; secretary, Dr. B. J. Larkin; councilor, Dr. O. T. Scamahorn.
A chicken dinner was served by the ladies of the Methodist Church. Dr. S. E. Earp, president of the State Medical Society, addressed the meeting. The dinner was followed by dancing.

CORRESPONDENCE

A NURSE’S OPINION OF THE INDIANA MEDICAL PROFESSION

Mississippi Baptist Hospital,
Jackson, Mississippi.

To the EDITOR:
Please allow a nurse to express her views through your columns.
Through a leave of absence to take a post-graduate course the writer concluded to do private duty in Indiana to get the viewpoint of the different doctors in different localities. Being a graduate in medicine as well as a trained nurse I was able to look on both sides of any question that came up. The one that came up most frequently was the difficulty the physician had in calling a nurse for either the small hospital or the home. I found only a few of the nurses registered with the official registry, the others registering for cases in the hospital from which they graduated.

The official registry gives the physician the assurance that the nurse he calls is trained, but if he cannot get a nurse, what good is that knowledge to him? I think that registering with the central registry should be compulsory.

I do not agree with Dr. Mayo’s view that health and strength are the most essential qualities that a nurse should possess. She should know what to look for in any disease. Often a patient’s life can be saved if she is able to recognize a condition and notify the physician in time. She should know anatomy fully as well as the doctor. I have seen nurses woefully at sea in locating pain.

Dietetics is a branch in the education of a nurse that has been sadly neglected. This is a work that can be done only by women. No physician has time to write out an exact list of foods for his patient, and he is handicapped when he has a nurse who is inadequately trained in this branch of medical service. The nurse should know more than how many calories to give. The classification of foods has no value to her unless she can balance a diet in a diseased condition without seeking the information from the doctor in charge of the case. She should be able to work out a diet in an acute disturbance of the intestinal tract, cardiac disease, or the doctor’s order for “light diet” as the case may be. She should know what foods give acid reaction, which alkaline.

Leaving the subject of diet we take up the often-discussed question of the nurse’s fee. First of all, we do not consider it high, inasmuch as she has to spend twenty hours out of twenty-four with her patient. Who is it who cares to sleep in the same room with an ill person? More often with a foul drainage case? Believe me, no nurse enjoys it, neither does she enjoy being seen in her night-dress. A physician seldom complains of the nurse’s fee. I worked for twelve different doctors in twelve different localities. If there was any doubt of receiving my pay, the physician got it for me before I left the case. If the case was hard a second nurse was called promptly. I received verbal appreciation for my services; I received every courtesy possible. There was absent any feeling of inferiority; I was treated as an equal in intelligence and educational standing.

To sum it up, I leave Indiana with the highest regard and kindest feeling toward “Hoosier physicians”.
ROSE MOORMAN.

SOME REFLECTIONS ON STANDARDIZATION

Lafayette, Indiana.

To the EDITOR:

Occasionally some disciple of higher standards in our ranks, with spare time from his arduous practice, advocates periodical examinations and a check-up on physicians with a view of weeding out those who do not measure up to certain standards. These standards are to be fixed by certain learned members, selected by other equally learned members of central organizations. Not content with requirements for medical education which is certain to deplete rural districts of doctors when this generation shall have passed out, these exalted mentors must now pose as board of censors and arbiters on fitness throughout a physician's professional career.

When Jones left school or his internship, he moved in "back of the yards" and plied his art among the lowly, into houses with a garlic farewell and unpolished floors; but he has been a comforter in need and the kiddies will fight for him. His old pal, Smith, dead broke when he finished, beat it for the hills and there he stays, on the road night and day. Yes, they both know the whims and eccentricities of every blooming kid and grandma within their respective zones. Little Joe can't swallow a capsule and Mamie can't down a tablet, but "Doc" remembers all that and plugs right along, so busy that he hasn't taken a vacation in ten years, much less a post-graduate course. Everybody knows their human touch outshines their lack of laboratory technique.

Are you going to root those fellows out after ten, twenty or thirty years of devotion in a cause such as few men can love or endure? Who will take their places? The author who compiles textbooks or he who vaunts his theories before his fellows? Let these honored members of the profession who are so wrought up over the welfare and standing of trained men ply their weapons on the vast army of self-styled doctors with little or no training, the cultists, faddists and quacks in general. Here is a fertile field for work and reform. The regular profession is as good or better than their clientele deserve. The doctor is serving in God's work and doing a he-man's job.

Reform workers and uplifters in all lines have been overzealous for quite a long spell. Why not emulate the conduct of a good practitioner—ease up on their medication and let nature take its course for a time.

If the present central organization with its active satellites do not soft pedal these pet activities, we are headed straight for some form of socialistic or state medicine. Perhaps that is what they want. Is it what the men in the rank and file want? Think it over.

LOUIS A. BOLING, M.D.

PAY BEDS IN THE RILEY MEMORIAL HOSPITAL

Editor THE JOURNAL:

In regard to your Editorial Note on the Robert W. Long Hospital concerning "some provision for making the entire hospital a charity hospital," it may be of interest to the Medical Profession of the state of Indiana to know the report of the committee on State Medicine of the Marion County Medical Society in reply to a question concerning pay beds in the Riley Memorial Hospital.

Mr. Chairman:

In offering these few remarks your committee has unanimously agreed upon the following sentiment: We are not offering this in the nature of a report for acceptance or rejection, but as a comprehensive reply to the question referred to your committee on State Medicine. We are persuaded that upon this subject of pay beds in state hospitals one must be both cautious and bold. The path leads between cowardly evasion on the one hand and partisanship on the other. The responsibility of choosing the way rests heavily upon one whether he confines himself to facts or expresses a restrained opinion. It is difficult to express a restrained opinion, for if intelligently expressed it is hardly restrained.

On this subject your committee has very strong and definite persuasions and they wish their brother physicians to bear that in mind. However, your committee will confine its reply to fact.

On the evening of March 21, 1922, the chairman of this committee had the honor of reading before this society a paper relating to socialized medicine. Doubtless most of you remember that paper. As a consequence, the society voted a resolution forming a committee of five to draft, if you please, a Declaration of Principles. You will recall that committee and the fact that the president drafted them immediately and without consultation as to their desires to serve. This committee took considerable time to study the policies concerned, both in this country and several foreign countries with which different members of the committee were fully cognizant. The committee drafted, according to their beliefs, the most forward looking Declaration of Principles in regard to socialized medicine ever drafted in this country. On April 25, 1922, this society on presentation of those resolutions wisely and unhesitatingly adopted them. In view of the powerful though small minority of opposition that was a commendable display of the courage of convictions. To make this complete and to settle any question which in the future may arise I will read part of that Declaration of Independence.

"Resolved, That while the Indianapolis Medical Society heartily supports the proposition that the State should care for its mental and moral defectives, and its indigent sick, it unqualifiedly condemns the tendency of the State to enter into competition with licensed physicians in the practice of Medicine and Surgery, and it condemns the maintenance of pay beds and pay wards in State Institutions or those partially subsidized by the State." You see this society committed itself by a recorded vote to the opposition of any policy, understand please, to any policy of maintaining pay beds and pay wards in State Institutions or those partially subsidized by the State. Any State Institution maintaining pay beds or wards does not meet with the approval of this Society. I do not believe any member of this Medical Society would care to espouse State Medicine, Socialized Medicine, or Socialism in Medicine by attempting to reverse the position already taken. However, if there is a champion of Socialism, I am willing to grant him the privilege of continuing privately to nurse his delusion until he is individually sucked to death or he weans his nursing.

On May 25, 1922, just one month after this Society took its stand against State Medicine, the American Medical Association in session at St. Louis by its House of Delegates after careful deliberation and thorough debate of the principles involved, passed the following resolution:

"The American Medical Association hereby declares its opposition to all form of 'state medicine' because of the ultimate harm that would come to the public weal through such form of medical practice.

"'State medicine' is hereby defined for the purpose of this resolution to be any form of medical treatment, provided, conducted, controlled or subsidized by the federal or any state government, or municipality, excepting such service as is provided by the Army, Navy, or Public Health Service, and that which is necessary for the control of communicable diseases, the treatment of mental disease, the treatment of the indigent sick, and such other service as may be approved by and administered under the direction of or by a local county medical society, and are not disapproved by the state medical society of which it is a component part."

While our position relating to state medicine was taken one month previous to that of the American Medical Association, we occupy identical ground. According to the A. M. A. any state institution maintaining pay beds or pay wards if not endorsed by the county and state society stands outlawed by the House of Delegates and cannot meet with its approval.

(Continued on Advertising Page xx)

Specify and Insist on *Armour's* When Prescribing Thyroids

Since the advent of Thyroids as a medicinal agent all sorts of "active principles" have been exploited. Best results have been gotten, however, from Armour's Thyroids in powder and tablets.

The therapeutic value of Thyroids appears to lie in several things present in the gland which are preserved in the substance when carefully prepared.

In the manufacture of Armour's Thyroids the raw material is selected carefully. Fresh normal glands only are used. The finished product is standardized and runs 0.2% Iodine and contains the other elements of Thyroids uninjured by heat. We supply Thyroid powder and 1/10, 1/4, 1/2, 1 and 2 grain tablets.

Each grain of Armour's Thyroid powder is equivalent to 5 grains of fresh glandular substance and each tablet contains the named amount of powdered Thyroids.

Pituitary Liquid, standardized, in ampoules.
1/2 c. c. obstetrical, 1 c. c. surgical.

Suprarenalin Solution 1:1000, water white,
stable, free from preservatives.



Full Literature on Request

ARMOUR AND COMPANY

CHICAGO

WALLACE-SOMERVILLE SANITARIUM

Succeeding the Pettey & Wallace Sanitarium

MEMPHIS, TENN.

WALTER R. WALLACE, M.D.
WILLIAM G. SOMERVILLE, M.D.

FOR THE TREATMENT OF

**DRUG ADDICTIONS, ALCOHOLISM
MENTAL AND NERVOUS DISEASES**



Located in the Eastern suburbs of the city.
Sixteen acres of beautiful grounds.
All equipment for care of patients admitted.

Louisville Neuropathic Sanatorium

INCORPORATED

1412 South Sixth Street, Louisville, Kentucky

and Nervous Diseases. Situated in residence portion of the city, yet quiet and retired. Rates furnished upon request.

W. E. GARDNER, A.B., M.D.

Medical Director

W. E. BENDER, M.D.

Resident Physician



CORRESPONDENCE

(Continued from Page 382)

Now, there you have it. You have heard the Law and Gospel. This society did not make all the Law nor preach alone the Gospel. Nevertheless, the chairman of this committee expresses the pride the committee has for the unflinching support of the society. If this society should reverse its stand toward pay beds in state institutions or those subsidized wholly or partially by the state it would then take its stand in favor of state medicine as defined by, and opposed by the American Medical Association "because of the ultimate harm that would come thereby to the public weal through such form of medical practice."

Your committee believes in keeping faith with the medical profession. If this committee did not mean what it said, if this society last May, or the State Society two years ago did not mean what it said, or if the House of Delegates of the A. M. A. did not mean what it said, then we are based upon fraud without honor or merit in our cause.

FREDERICK E. JACKSON,

Chairman, Committee on State Medicine,
Indianapolis Medical Society.

Reply of the chairman of the committee to a question addressed to him concerning the policy of pay beds in the Riley Memorial Hospital and referred to the committee on state medicine.

BOOK REVIEWS

HOW WE RESIST DISEASE. By Jean Broadhurt, Ph.D., Assistant Professor of Biology, Teachers College, Columbia University. 138 illustrations. 248 pages. Cloth, \$2.50. J. B. Lippincott Company, Philadelphia, 1923.

This is a book for nurses and general college students. It gives in clear and simple language the main principles of immunity, covering in a general way the most important preventive and curative practices. It discusses bacteria and their effect upon the human body, active and passive immunity, toxins and antitoxins, agglutinins and precipitins, opsonins, white corpuscles, lysins, vaccines, anaphylaxis, etc. Particular attention has been given to the illustrations.

TONSILLECTOMY, BY MEANS OF THE ALVEOLAR EMINENCE OF THE MANDIBLE AND A GUILLotine. By Greenfield Sluder, M.D., Clinical Professor and Director of the Department of Rhinology, Laryngology and Otology, Washington University School of Medicine, St. Louis, Mo. 176 pages, 90 illustrations. Cloth, \$5.00. C. V. Mosby Company, St. Louis, 1923.

As stated by the author, this book is intended to present satisfactorily the method of tonsillectomy by what is known as the Sluder method. In addition to describing at length the author's technic and the removal of tonsils by means of the alveolar eminence of the mandible and the guillotine, the book contains a description of embryology, comparative anatomy, physiology, pathology and surgery of the tonsil. Theories of tonsil function are discussed, and the author states that he is not prepared to accept any one of the theories discrediting the others. He believes that there is a little truth in all the theories that have been proposed, and that the tonsil behaves much like the other lymph glands of the body, and that the mucous membrane which covers the tonsil shares all its attributes with the rest of the oral membrane. The general pathology of the tonsil is discussed and a description of the various types of inflammation given and illustrated by cuts showing the microscopic bacteriology and pathology of the various types of inflammation. The indications for tonsillectomy and the results secured cover a large

series of cases and furnish interesting reading. Of particular interest are the chapters devoted to the operation, the manner of performing it, choice of anesthetics, and complications. The author has even discussed the modifications that have been suggested by various authors together with the modified instruments offered to take the place of the Sluder instruments. The various steps of the Sluder operation are not only described in minutest detail, but made clearer by a large number of excellent illustrations. An extensive bibliography completes the book.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

NEW TUBERCULIN B. E. DRIED.—To obtain this product, tubercle bacilli are dried, ground for several months in a ball mill, the finely disintegrated bacillary bodies are mixed with a suitable base and made into tablets. Each tablet represents a definite amount of New Tuberculin B. E. Dried.

TABLETS TUBERCULIN B. E.-P. D. & Co.—New Tuberculin B. E. Dried, marketed in vials No. 1 of ten tablets, each tablet containing 0.0001 mg.; in vials No. 2 of ten tablets, each tablet containing 0.001 mg.; in vials No. 3 of ten tablets, each tablet containing 0.01 mg.; in vials No. 4 of ten tablets, each tablet containing 0.1 mg.; in vials No. 5 of ten tablets, each tablet containing 1 mg.; also marketed in packages of 5 vials, Nos. 1, 2, 3, 4 and 5, inclusive. Parke, Davis & Co., Detroit.

NEW TUBERCULIN T. R. DRIED.—The mass culture of tubercle bacteria is washed repeatedly, agitated again in water, washed, ground to complete disintegration, extracted repeatedly with water, and the water insoluble material, instead of being ground to form a suspension in water as in New Tuberculin T. R. Liquid, is dried. The dried material is thoroughly mixed with a suitable diluent. Each tablet represents a definite amount of dried tubercle bacilli.

TABLETS TUBERCULIN T. R.-P. D. & Co.—New Tuberculin T. R. Dried, marketed in vials No. 1 of ten tablets, each tablet containing 0.0001 mg.; in vials No. 2 of ten tablets, each tablet containing 0.001 mg.; in vials No. 3 of ten tablets, each tablet containing 0.01 mg.; in vials No. 4 of ten tablets, each tablet containing 0.1 mg.; in vials No. 5 of ten tablets, each tablet containing 1 mg.; also marketed in packages of five vials Nos. 1, 2, 3, 4 and 5, inclusive. Parke, Davis & Co., Detroit.—(*Jour. A. M. A.*, Oct. 6, 1923, p. 1207).

SAL-ETHYL.—A brand of ethyl salicylate-N. N. R. For a discussion of the actions, uses and dosage of ethyl salicylate, see New and Nonofficial Remedies, 1923, p. 272. Sal-Ethyl is supplied in the form of Sal-Ethyl Capsules, 5 minims. Parke, Davis & Co., Detroit.—(*Jour. A. M. A.*, Oct. 13, 1923, p. 1285).

ANTIDYSENTERIC SERUM-P. D. & Co.—An antidyenteric serum (see New and Nonofficial Remedies, 1923, p. 287) obtained from horses immunized against several strains of Shiga and Flexner types of dysentery bacilli. It is marketed in packages of one syringe containing 10 Cc.; in packages of one vial containing 10 Cc.; in packages of one vial containing 20 Cc. Parke, Davis & Co., Detroit.—(*Jour. A. M. A.*, Oct. 20, 1923, p. 1363).

CHEPLIN'S B. ACIDOPHILUS MILK.—A milk culture of bacillus acidophilus, containing not less than fifty million of viable B. acidophilus per Cc. at the time of sale. For a discussion of the actions and uses of bacillus acidophilus milk, see Lactic Acid-Producing Organisms and Preparations (*Jour. A. M. A.*, Sept. 8, 1923, p. 831). For adults the dose is from 500 Cc. to 1,000 Cc. Cheplin's B. Acidophilus Milk is marketed in bottles containing, respectively, 200 Cc. and 400 Cc. Cheplin Biological Laboratories, Inc., Syracuse, N. Y.

THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, Jr., B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XVI

DECEMBER, 1923

NUMBER 12

ORIGINAL ARTICLES

MEDICAL SOUTH AMERICA*

F. W. FOXWORTHY, M. D.
INDIANAPOLIS

As a result of extensive traveling in South America in 1922 and 1923, visiting hospitals and medical colleges along the western coast, the interior of Bolivia and Peru and also the eastern coast, I cannot agree with the statement that "the doctors, collectively, excel socially and professionally the doctors in the United States." This statement appears on page 37 of Dr. Franklin Martin's admirable volume on South America. Dr. Martin is referring especially to the doctors of Peru and, probably more especially, to the surgeons of that country. His volume is illustrated with many portraits of handsome surgeons and, as a book of travel, is most excellent. As a statement of surgical conditions in South America it may not portray the exact situation, and as a statement of facts in regard to internal medicine I am sure it is erroneous. I cannot believe that

sicians and surgeons. I was told by our Consul General at Lima, Peru, (Mr. Guyant), that it was customary for the leading doctors to run a display advertisement once or twice a week in the daily papers and street cars and yet their advertisements are absent in the Medical Journals. Their Medical Journal, *La Cronica Medica*, published at Lima, Peru, of the date of October 1922, has not a single advertisement of any physician. Several times have I seen display advertisements of men who called themselves members of the American College of Surgeons. The attached clipping from *El Pueblo*, a daily paper of Arequipa, Peru, of the date of November 20, 1922, is an example of this. What would happen to any member of the American medical profession who did likewise?

Doctor Castañeda

Ex-profesor de cirugía en la Facultad de
Lima Cirujano del Hospital Santa Ana

Miembro del Colegio Americano de Cirujanos
y de la Sociedad Peruana de Citujia

CIRUGIA GENERAL

Estudios en Europá y Estados Unidos

San Juan de Dios No. 127 Telefono No. 387

Arequípa, Junio 26 de 1922

1 a pág pmt alt 920



FIGURE 1—BEAUTIFUL GARDEN OF SANATORIA COVADONGA

a surgeon or internist can do first class work in hospitals that are not up to the standard of the poorest hospitals recognized by the American College of Surgeons.

It was in Peru that I saw the daily papers almost entirely filled with advertisements of phy-

May I also quote from Dr. C. E. Roe, Assistant Editor of the *Medicina Ibero*, who states that "Hospital practice is tinged with commercialism, quackery is in the saddle and even physicians do not hesitate to advertise in a quack-like form; medical schools lack the necessary facilities."

Many years ago the great surgeon, Nicholas Senn, wrote a most interesting account for the *Journal of the American Medical Association*, of the hospitals, clinics and medical colleges of South America. Later, Dr. Will Mayo wrote a series of articles for the same publication, describing his visit to South America.

The physicians and surgeons whom I met in South America were most courteous, very hospitable and eager and glad to have an American

* Presented before the Section on Medicine of the Indiana State Medical Association at the Terre Haute session, September, 1923.

physician visit them. May I mention one instance? Dr. Francisco Grana, Professor of Surgery of the faculty of the Medical College, the University of San Marcos, Lima, Peru, whose picture appears in Dr. Martin's book, is, I believe, the President of the Senate of that country. He is prominent both professionally and socially, and had an autographed photograph of Dr. Will Mayo on his desk. He gave me an entire morning, laying aside urgent business in order to take me to the different hospitals and the medical college. His courtesy and kindness could not be surpassed.



FIGURE 2—GORGAS MEMORIAL INSTITUTE UNDER CONSTRUCTION AT PANAMA

I found this same spirit among the surgeons of other parts of South America. After accepting such hospitality it is hard indeed to record the exact conditions as seen. Dr. Martin received great attention, even from the civil authorities, and it is possible that these wonderful attentions may have wiped out of his mind the darker parts of the picture. Dr. Martin did not visit the interior of Peru, where sanitary conditions are most horrible. At Cuzco, even after 14 years' intelligent work by Dr. Gieseke, I found the most filthy markets I have ever seen in any place in this world. The stench, filth and flies were awful. The handling of the food was so filthy that Dr. Gieseke even had the strawberries we ate scalded with boiling water first. Is it not possible that Dr. Martin saw but the best of South America?

I visited the principal hospital—the one Dr. Martin saw, at Lima, Peru. It is called the Dos



FIGURE 3—COMPLETED BUILDING SANTA TOMAS HOSPITAL, PANAMA—A PART OF GORGAS MEMORIAL HOSPITAL

de Mayo and is a number of one-story buildings at the edge of the city. The wings are large and long and range from a central court. They are old and antiquated. Since Dr. Martin's visit the windows have been screened, but I noticed the doors were not and they were wide open. There were a few nurses present who seemed bright and quick-witted. Plenty of internes and students were grouped around the different beds as Drs. Gonzales and Arcy were holding clinics.

In this connection may I remark that the general practitioners and specialists in internal medicine are usually considered to be on a lower plane than the surgeons. I was interested in knowing that they never use the Sippy treatment in gastric or duodenal ulcer, as Dr. Arcy says it is too much trouble. There are several places in South America where it is impossible to get fresh milk and eggs. The treatment in such cases is always surgery, and many times the results are not beneficial. In this hospital nine out of ten cases were cases of malarial fever. I saw many cases of tuberculosis in the same ward with other patients.

Dr. Arcy has done a great deal of excellent work in studying the cause of Verrugas. This strange disease of a valley of the Andes, in which the Oroya Railroad is situated, is transmitted by mosquitoes. There are two varieties of this dis-



FIGURE 4—GARDEN OF THE BRITISH AMERICAN HOSPITAL, CALLAO, PERU

ease, both of which I saw in this hospital. The worst variety has no eruption but very high fever and progressive anemia, resulting fatally. There is no pain. The other variety has large eruptions which look like sacs of blood. These tumors may come anywhere. In one case I saw them protruding from the eye, the pharynx, the side of the lip and from other parts of the body, and upon examining this man's chest I found there were scores of small tumors underneath the skin that would soon come through the surface. These lesions also infest the internal organs. This variety is usually not fatal. There is no specific treatment for it. Salvarsan, arsenic and iron have no effect. There is no isolation for these cases.

The Dos de Mayo is the type of many other hospitals in South America in that the exterior

part of the hospital is made most attractive but the interior is most depressing. The religious element is worked over-time and statues, altars and pictures are without exception used to an excess in all the native hospitals in South America. This hospital is much like the Sanatorio Cova-donga in Havana, which has the most beautiful grounds I have ever seen, lovely gardens and palms around the paths, but it has no screens and many flies. The Manager of the Plaza Hotel, Havana, who took me through the Sanatorio Cova-donga told me it cost him \$200 a month for tips to the employees to get attention for his father, who has cancer of the face. In fact, in most of the native hospitals of South America, the patient seems to be the last thing to be considered.

I visited the French Hospital at Lima, with Dr. Grana, which was evidently a private hospital for the wealthy. I asked Dr. Grana to let me see the Santa Ana Hospital. He smilingly replied it was never shown to visitors and that it was a very old charitable hospital. We found it very filthy. Some of the rooms had no windows. There were no screens and lots of flies. There were many cubicles along the walls which were little recesses in the brick walls sufficiently large to accommodate a person lying down. They were formerly used for the sick. This hospital was so filthy and ancient that I could agree with Dr. Grana that it was best not to take visiting physicians there.

The best hospital in Peru is the British-American Hospital near Callao, which is small but very clean and well screened, has a sterile operating room and five American nurses. Dr. Flick is doing a wonderful work there.

At Arequipa, Peru, the Guyeniche Hospital has cost nearly a million dollars, much of which has been spent on the beautiful chapel in the center of the grounds. It is supposed to be the largest hospital in South America, and has no screens and no nurses, and the large wards are dark and disagreeable.

The beautiful new hospital in La Paz, the capital of Bolivia, the Miraflores, I visited with Mr. Frank Beck, the Superintendent of the Ameri-

can Institute. The buildings are new and beautiful, but there are no screens and plenty of flies, and I found typhus fever, malta fever and tuberculosis in the same wards with other diseases. The kitchen was most filthy, and on one table I saw an animal that had been dissected that looked



FIGURE 6—SALVADOR HOSPITAL, SANTIAGO, CHILE

like a large rat, while at the same table the meat for the patients was being prepared.

The hospitals instituted by the Guggenheim copper interests at their different mining plants are all modern American Hospitals, but they have difficulty in keeping American surgeons in charge on account of the laws of Chile which are very similar to the laws of the other countries of South America. License to practice is granted only after a thorough examination in Spanish; and in the Argentine foreign physicians must take a set of examinations through a period of two years. I believe the fees for these examinations are also very high—about five hundred dollars in gold. I understand this same rule applies to dentists. Dr. Flick, at Lima, Peru, was practicing under a special order of the President of Peru, which is revocable at the pleasure of the President. An American surgeon at the Chuquicamati mine, according to a statement made to me by Mr. Kemp, the Manager, cleared \$30,000 a year for three



FIGURE 5—DOS DE MAYO HOSPITAL, LIMA, PERU

years, when the Government required him to leave. He got by that length of time by employing a Chilean physician to be the nominal head of the hospital and he was the assistant. Of course, in reality, he did all the big surgical work himself. There are a few, very few, American and British physicians in South America who have been born in that country, or lived most of their lives there and they have been able to secure licenses to practice, but at the present time South America is closed to American physicians, surgeons and dentists, except in a few isolated cases.

Even if their hospitals were the equal of ours, which they are not; even if the medical profession as a whole was equal to our own, which it is not,—any country which allows its medical profession to remain in isolation, thereby preventing progress, cannot expect to have our approbation.



FIGURE 7—ALVEAR HOSPITAL, BUENOS AIRES
(Notice no screens on the windows)

I visited the Hospital San Vincent de Paul at Santiago, Chile. It is the largest in Chile and is used for teaching the medical students. There are a few nurses there. I learned of one young lady, a medical student who had taken the examination at three different times and although I understand her grades were good, they would not give her a license to practice because she was a woman.

I also visited a beautiful hospital, called the Salvador, at the edge of the city of Santiago. To get there you have to pass over so many rocky and rotten streets that the patient would certainly be sick by the time he arrived there if he had not been sick before. Some of the wards are about a block apart, and while the grounds are beautiful it would require an automobile to visit the different parts of the hospital.

At Buenos Aires I visited several hospitals; the Alvear, the largest, has 3,000 beds. It took me fifty minutes by street car to get there, as it is some distance from the center of the city. The wards are kept so dark on account of the flies that it is impossible to read in them. This is much like the hospital at Santiago, so I will not describe it.

The best hospital at Buenos Aires was the British Hospital, which has splendid nursing, is aseptic, sanitary, and has sunshine wards on the porches which are kept well screened.

The Hospital de Clinica is across the street from the Medical College and is composed of large old buildings. They have some nurses in addition to the Sisters of Charity. I saw several patients there with their heads wrapped up in bed clothes to keep the flies away.

The Medical College is an immense building with beautiful marble stairways and plenty of statuary. Like most of the large hospitals in South America, the external appearance is pleasing to the eye.

In Montevideo the Italian Hospital is a memorial erected by an Italian. It is a most beautiful and up-to-date building. They even have a blue room at the entrance of their operating room to keep the flies out. It is probably the most beautiful building in South America of its kind.

At Rio Janeiro I went through the Misericordia Hospital, which is just outside the Exposition grounds. It is a typical native Spanish Hospital. There are several others that I visited, but the native hospitals are so much alike it is not worth mentioning more of them.

Since writing the above remarks about Medical South America, might I call your attention to the state of the Medical College in Buenos Aires as is shown by a letter from the regular correspondent of the *Journal of the American Medical Association* dated September 8, 1923. He states: "Not long ago, a majority of the professors in the medical school requested an amendment to the regulations providing that the majority of the executive board should be professors—at present they are in the minority—and that students should have no voice in the election of the professorial members of the board. As this plan was not even considered, a complaint was filed by the sponsors of the amendment before the superior board of the university. As a result, the executive board of the medical school and the dean tendered their resignations. The students then held public meetings, asking that the resignations



FIGURE 8—ITALIAN HOSPITAL, MONTEVIDEO

be not accepted and that the complaint be withdrawn. They succeeded in carrying both points, but the executive board of the school, as soon as reinstated, submitted a plan for reforms that is larger and even more radical than the previous one. This time the students have not protested."

How many professors in our own Medical Colleges would survive if they were elected or controlled by the students?

This brief survey of South America, as seen through the eyes of an internist instead of a surgeon, and seen without the hospitals being prepared for a visit, should convince anyone that it is a terrible thing to be sick in South America and have to be treated in a native hospital. As a teacher in the Girls' School at Santiago, Chile, told me, "You are certainly out of luck to be sick anywhere in South America unless you can get to a British-American hospital."

DIPHTHERIA

C. C. DuBois, M.D.

WARSAW

Diphtheria stands in a very favorable position as compared with the other acute infectious diseases. It is the only acute infection in which the causative organism is known and easily isolated for diagnosis; it is the only one for which there is a curative serum of value; it is also the only one of the acute infections in which the immunity or susceptibility of the patient can be found easily and, susceptibility having been determined, an immunity of long duration can be established safely and positively.

These facts are not new. The diphtheria bacillus has been known for forty years, the curative antitoxin serum for thirty years, the Schick test for immunity and toxin-antitoxin immunization both have been practiced for ten years.

One would, therefore, expect that under such ideal conditions as to treatment and immunization, diphtheria would have lost its terrors. To a certain extent such is the case, surely so, as compared with the frightfulness of the disease seen by the older practitioners. But it still ranks high in morbidity and mortality as statistics show.

In this small town of fifty-four hundred we have had ninety cases in the past fifteen years, seventy-two of them in the past five years. Ten cases died. The following tables show the cases and deaths in Indiana, and the registration area of the United States for the past five years, figures surprisingly high.

TABLE I			
(Indiana)			
	Cases	Deaths	Deaths in U. S.
1917	4215	444	12442
1918	2839	428	11183

*Presented before the Thirteenth Councillor District, Plymouth, 1923.

1919	2603	320	12551
1920	2566	358	13395
1921	6542	700	15683
1922	4625	534

Indiana State Board of Health records.

An interesting comparison of deaths from acute infections is shown in Table II, in which diphtheria despite its curative serum and ease of immunization, ranks first in the number of deaths. Thus does practice lag behind knowledge.

TABLE II			
	1920	1921	
Measles	7712	3790	
Scarlet Fever	4004	4718	
Pertussis	10963	8070	
Diphtheria	13395	15683	

United States census.

Mindful of these figures showing the failure of the profession to attain ideal results, viz., the eradication of diphtheria which should be approximately reached when working under ideal conditions, the writer sought to ascertain how his neighboring physicians were utilizing the advantages at hand.

Accordingly, two hundred and eight letters were sent to as many physicians of the district (Thirteenth Indiana) asking the following questions, to which one hundred and twenty replied:

1. If you see a normally developed child of five years with pharyngeal diphtheria of forty-eight hours' duration, what would be your initial dose of antitoxin?
2. How many units would you expect to give in twenty-four hours?
3. Do you use toxin-antitoxin immunization in private practice?

The answers to the first question as to the custom in antitoxin dosage showed amazing differences, as seen by Table III. One would give no antitoxin, (his type fortunately has almost vanished from our ranks). But it is seen that the initial dose varies up to fifty thousand.

TABLE III	
Sick forty-eight hours—Initial Dose	
1 Doctor recommended	O Antitoxin
8 Doctors recommended	below 5000 Units
20 Doctors recommended	5000 Antitoxin Units
6 Doctors recommended	7500 Antitoxin Units
44 Doctors recommended	10000 Antitoxin Units
1 Doctor recommended	11000 Antitoxin Units
4 Doctors recommended	12500 Antitoxin Units
8 Doctors recommended	15000 Antitoxin Units
1 Doctor recommended	17500 Antitoxin Units
21 Doctors recommended	20000 Antitoxin Units
4 Doctors recommended	25000 Antitoxin Units
1 Doctor recommended	40000 Antitoxin Units
1 Doctor recommended	50000 Antitoxin Units
9 Used	intravenous route
10 Used	one big dose only
47 Used	toxin-antitoxin
73 Did not use	antitoxin

Table IV shows even greater variation, up to seventy thousand units recommended for the first twenty-four hours.

TABLE IV

1 Doctor gives	0 Units
2 Doctors give	3000 Units
5 Doctors give	5000 Units
3 Doctors give	7500 Units
1 Doctor gives	9000 Units
18 Doctors give	10000 Units
7 Doctors give	15000 Units
5 Doctors give	17500 Units
22 Doctors give	20000 Units
6 Doctors give	25000 Units
1 Doctor gives	27500 Units
8 Doctors give	30000 Units
4 Doctors give	35000 Units
9 Doctors give	40000 Units
1 Doctor gives	45000 Units
3 Doctors give	50000 Units
2 Doctors give	60000 Units
2 Doctors give	70000 Units

While these figures cannot be taken to show what each man would do in every case, nevertheless it serves to indicate each one's idea as to antitoxin use, and that its dose is not generally well founded.

Theoretically, only a small amount is necessary; .03 units per cc. of blood serves to render a patient immune. And according to Parks no patient elaborates toxins in amounts that can not be neutralized by 100 units of antitoxin. Practically an excess is required to neutralize the continued toxin produced and to make sure that the large protein molecule to which the antitoxin body is attached, penetrates into the intercellular spaces which have been permeated by the toxin. However, clinical experience shows that the mortality from excessively large doses is not noticeably less than from smaller doses. Dr. E. H. Place of Boston gives the interesting data from the South Department, Boston City Hospital, showing only slight difference in mortality when the average dose was 1,800, 15,000 and 30,000 units per patient.

TABLE V

Year	Cases	% Deaths	Average Dose Antitoxin
1895-6	1654	8.8	1800
1900-1	1913	9.4	15000
1920-1	820	7.6	30000

Probably no better authority based both on laboratory and clinical knowledge of diphtheria can be found than that of Dr. W. H. Park, of the New York City Board of Health. In the light of scientific knowledge and clinical experience his table of dosage would seem a safe one to bear in mind in treating diphtheria.

TABLE VI

	Mild	Early Mod.	Late Mod. or Severe	Severe and Malignant
Infant 10-30 lbs. under 2 years	2000 to 3000	3000 to 5000	5000 to 10000	7500 to 10000
30-90 lbs. under 15 years	3000 to 4000	4000 to 10000	10000 to 15000	10000 to 20000
Adults	3000 to 4000	5000 to 10000	10000 to 20000	20000 to 50000
	Intramuscular		Intravenous	

The answers to our questions revealed another feature of practice. Nine advocated intravenous use and ten advocated only one dose of antitoxin. Since the diphtheria toxins combine quickly with tissue cells and such damage cannot be undone by any amount of antitoxin the importance of getting antitoxin into the blood quickly is evident. The highest point of concentration of antitoxin given intravenously is at the time of injection. Absorption by intramuscular or subcutaneous routes takes time, the former reaching its highest concentration in forty-eight hours, the latter in seventy-two hours. Great advantage is therefore seen in the intravenous method, which should be the method of choice, at least in severe or neglected cases.

Ten doctors out of the one hundred and twenty replying to my letters indicated their choice of a single but sufficient dose of antitoxin. This custom should be universally applied, for as Park says, "there is no harm in giving repeated doses; the harm is in thinking that the giving of an insufficient first dose can be compensated for by giving later doses." The harm is in the delay. Experimentally, he proves this by giving rabbits 10 M. L. D. of diphtheria toxin; if antitoxin is injected in five minutes it takes only five units to save the rabbits; if given in ten minutes 200 units are required; if forty minutes elapse 4000 units are required; while if the antitoxin is delayed ninety minutes no amount will avail. The conclusion is evident and agrees with clinical results.

To the question as to the use of toxin-antitoxin, forty-three out of the 120 answered in the affirmative; however, a large majority of these indicated by their reply that they were giving antitoxin to children exposed to the disease and not using toxin-antitoxin. The number really using it in this district is evidently quite small.

SUMMARY

1. The dosage of antitoxin varies unreasonably in practice.
2. The amount is not of so great importance as early administration.
3. The practice of giving repeated doses is general; a single efficient dose of antitoxin is best.
4. The intravenous route should be used at least in late or severe cases.
5. Little advantage has been taken yet by the general practitioner of toxin-antitoxin immunization.

DIPHTHERIA CONTROL*

L. POTTER HARSHMAN, M.D.
FORT WAYNE

In the second century Aretaeus described an epidemic disease by the name of "Malum Egyptiacum," which symptomatically must have been diphtheria. Other epidemics appear to have taken place in Europe, but in 1821 the first accurate account of the disease was made by Bretonneau of Tours. He named it "La Diphtheria," meaning membrane. The causative agent was isolated by Kloebs and Loeffler in 1883. In 1894 Von Behring prepared antitoxin as did Roux of the Pasteur Institute. Ehrlich as early as 1893 was the first to discover that slightly under-neutralized plant toxins were capable of stimulating the production of antitoxin. Babes in 1895 applied this principle and was the first to inject experimentally diphtheria toxin-antitoxin mixtures and discover that the injection of under-neutralized as well as over-neutralized diphtheria toxin would cause the development of antitoxin in the blood stream. In 1913 Von Behring demonstrated the feasibility and safety of this work in the human. In that same year Schick published his results on an intracutaneous test by which an individual's susceptibility to diphtheria could be determined. Perhaps no more valuable work has been done along these lines in recent years than that of Park and Zingher of the New York Board of Health.

Concerning no other disease do we have so much epidemiologic information at hand: viz.,—a demonstrable causative factor, a specific treatment in antitoxin which is absolute if given early, a reliable susceptibility test, and a means of producing a passive as well as an active immunity.

Mortality. With such an abundance of weapons it seems there should be little or no diphtheria. However, in the United States there are some 200,000 cases yearly with approximately 20,000 deaths.¹ This 10 per cent death rate has been more or less persistent since the introduction of antitoxin in 1895. Further analysis of these figures shows that 85 per cent of the deaths occur before the sixth year of life; that 15 per cent of all cases have a cardiac involvement, whereas all fatal cases have myocarditis; that 10 per cent of all hospital cases are of the laryngeal type; and, that some form of paralysis is more often present than recorded or observed.

Diagnosis and Treatment. Briefly, symptomatic diagnosis and treatment on that score, though less scientific, is a means of choice in many instances, and the dictum, "A case needing culture for diagnosis needs antitoxin for safety" is not afar. However, fewer negative cultures in clinical cases of diphtheria will be had if greater care

is taken in getting the swab next the diseased tissue, which means lifting the membrane and swabbing next the bleeding points. Over 25 per cent of these cases will show Kloebs Loeffler bacilli on direct smear.

In treating ordinary pharyngeal diphtheria I have seen very little advantage in massive doses of antitoxin, especially if given early and by the intravenous route. Seldom is it necessary to administer more than 100 units per kilogram of body weight as prescribed by Schick² and oftentimes less will suffice. Oftentimes I give one-third of the dose by vein, one-third intra-muscularly, and one-third subcutaneously, thus having a reservoir of antitoxin to combat the toxin that is being absorbed from the pharynx.

There seems to be a prevailing idea that cases of laryngeal diphtheria need massive doses of antitoxin. A suffocating individual is given thousands of units, whereas, immediate intubation is more imperative, for the amount of membrane formed and the amount of tissue involved may be small compared to an ordinary pharyngeal case.³ Intubation may rightfully be spoken of as a lost art, and only with difficulty can one find an intubating set in the average community. Hoyne⁴ rightfully criticizes medical schools in their neglect to teach students the art of performing this operation which is far more difficult than doing a tonsillectomy or an average appendectomy. Certainly practice on the cadaver could be performed to much advantage. Hoyne clearly shows the value of trained help in this regard by the marked reduction of the mortality rate in cases of laryngeal diphtheria at the Chicago Municipal Contagious Disease Hospital. Owing to the laxity of the tissues intubation of a Mongol is a most difficult operation.

Post diphtheritic paralysis is of most concern when it is of the diaphragmatic type, bilateral cases of which are practically always fatal. Various stimulants and modifications of the pulmotor have been used, but here again prevention is much more important and effective. Contrary to some opinions Mixsell and Giddings⁵ from many observations logically conclude that the more severe the anginal attack, and, the greater the delay in antitoxin administration, the more likely is the patient to develop a paralysis.

Cardiac involvement is usually one of two forms; a partial or complete organic heart block about the eighth day, or, the development of extra systoles on the 32nd day.⁶ In some of the arrhythmias digitalis may have a place, but since it has the same tendency to produce heart block as does

*Presented before the Section on Medicine of the Indiana State Medical Association at the Terre Haute session, September, 1923.

1. Zingher, Abraham: Practical Applications and Uses of the Schick Test, N. Y. City Bd. Health, Reprint Series No. 94, 1921.

2. Schick, B.: Prevention and Control of Diphtheria, Boston Med. & Surg. Jr. 188:253, March, 1923.

3. Hogan, J. F.: Laryngeal Diphtheria, J. A. M. A. 77:662 August 27, 1921.

4. Hoyne, A. L.: Laryngeal Diphtheria, J. A. M. A. 76:1305, May 7, 1921.

5. Mixsell, H. R., and Giddings, E.: Certain Aspects of Post Diphtheritic Paralysis, J. A. M. A. 77:590, August 20, 1921.

6. Schwensen, C.: Heart Rhythm in Diphtheria, Jr. Infect. Dis. 30:279, March, 1922.

diphtheria toxin, too great care in its use cannot be exercised. I have seen a case where I felt sure the indiscriminate use of digitalis proved fatal.

Control will not be efficient until more rigid quarantine is exercised. I do not release a case until I have three negative cultures from both nose and throat at 24-hour intervals, one week removed from the last positive culture. This will reduce the number of contact carriers and the number of recurrent cases. Carey⁷ reports that 25 per cent of the diphtheria in Massachusetts has been recurrences in communities recently having had the disease. Likewise this should reduce the number of permanent carriers.

No doubt most every therapeutic agent has been used in treatment of diphtheria carriers. I have found fresh 20 per cent mercurochrome very valuable but not always reliable. Some men have used X-ray and Donnelley⁸ reports good results in using one to three doses of three to six minutes exposure to the ultraviolet rays from the Kromayer lamp.

Susceptibility. It has long been known that infants under one year of age seldom have the disease and that few adults take the disease when exposed. On the one hand antitoxin developed in the mother has passively immunized the infant for a while; whereas, on the other hand, frequent exposures have developed an acquired immunity. The Schick test consists in an intradermic injection of 1/40 M.L.D. of diphtheria toxin in .2 c.c. normal salt solution. On the amount of antitoxin in the cutaneous lymph depends the reaction, and if there is enough antitoxin present to neutralize the injected toxin there will be no reaction (unless a pseudo) and the individual is considered as having enough antitoxin in his body to protect him against taking the disease. Diphtheria toxin heated to 75°C for five minutes loses its toxicity and may be used as a control. Schick reactions are best checked by use of this control solution in the same manner as the test solution which must be fresh and from a reliable source or the results will be variable as shown by Zingher.⁹ Even the alkalinity of the glass container tends to cause deterioration of the toxin.

Different classifications of the susceptibility reactions have been proposed, but perhaps the better way is to divide the reactors into three main groups, the negative and pseudo, the positive and combined, and the suspicious. The negative show no reactions with the test solution or the control other than the mechanical effect of injection. With the pseudo a rather diffuse area of redness and very slight infiltration some five centimeters in diameter appears in 18 to 36 hours and subsides

in three days. This reaction appears with the control solution as well, and is due to bacillus protein. Individuals showing the above two reactions are considered immune. Positive reactions appear in 24 to 48 hours as an area of redness and rather marked induration 2.5 centimeters in diameter and last for about a week, followed by some pigmentation and desquamation which persists oftentimes for ten days or more. The control in this group shows no reaction. The combined reactions are combinations of the pseudo and the positive, and really belong to the positive or non-immune group. Some few cases do not fall in either of the above groups and are called suspicious but are treated as positives.

At the Indiana School for Feeble-Minded Youths we have applied the Schick test to some 1500 inmates and have obtained the percentages which follow: Patients over sixteen years of age showed 55 percent negative, 42 percent positive, and 3 percent suspicious; patients between six and sixteen years of age showed 33 percent, 65 percent and 2 percent, respectively. Although children between the ages of one and two years show the highest per cent of positives, there is a marked variability in the positives found in school children. Zingher¹⁰ reports variations from 15 to 75 per cent depending on racial and domicile conditions, children in sheltered homes and less crowded districts showing a higher per cent of positives than those whose chances were greater for repeated exposures to the less virulent and unrecognized forms of the disease which enabled them gradually to produce an immunity.

Immunization. Passive immunization, as practiced, gives an immunity for from 12 to 21 days for the first injection. If a second injection is given soon afterwards the period of immunity is probably lessened by five or six days. Active immunity until very recently consisted in three subcutaneous injections of 3 L+ dose, at weekly intervals, of diphtheria toxin slightly under-neutralized with antitoxin. Not much has been written as to the immediate effects of this procedure, but it seemed to me that the reactions were more severe than described in brochures on the subject. In a group of one-hundred unselected cases I found three-fourths of them showing an albuminuria 24 hours after the first injection and clearing up in a week. At this same time these cases showed an average leucocytosis of 16,000 per c.mm., the highest being 22,000. In these cases the temperature rise was from one to seven degrees with an average of two degrees of fever. The local reaction consisted of a reddened, indurated area some three inches or more in diameter. These reactions were reduced somewhat after the second injection and considerably so after the third injection. I have made like observations on the

7. Carey, B. W.: Diphtheria Control, J. A. M. A. 77:668, August 27, 1921.

8. Donnelley, L. C.: Sterilization of Carriers with Ultra-violet Rays, Mich. St. Med. Jr. 20:356, July, 1921.

9. Zingher, Abraham: Accuracy of Schick Reaction, J. A. M. A. 75:1333, November 13, 1920.

10. Zingher, Abraham: Diphtheria Prevention Work in Public Schools, Dept. Health, N. Y. City, Reprint Series No. 96, November, 1921.

reactions to typhoid vaccine and to smallpox virus, and find these to be much less severe on the average.

Six months after the first series of injections the Schick test was reapplied, and of the cases over sixteen years of age we found 89 per cent with negative Schicks, 10 per cent positive, and 1 per cent suspicious. Cases under sixteen years of age showed 97 per cent, 2.5 per cent, and .5 per cent respectively. Those showing positive and suspicious Schicks again were given three injections of the toxin-antitoxin mixtures, and six months later all but two cases showed negative Schicks. Granting that the instable physiologic functions in the feeble-minded would result in more severe reactions I cannot but feel that these reactions would soon bespeak the popularity of active immunization in the smaller communities. To overcome this, Park recently has a new formula which has in it one-thirtieth (.1 L+ dose) the amount of toxin used in the first preparation. I have been using this only recently and note marked amelioration of all reactions, but cannot report as to its efficiency. However, the efficiency of the first preparation is beyond doubt. Forty-five cases of diphtheria a winter was not an unusual occurrence at the feeble-minded home. But among those immunized we have had only one case of diphtheria develop, and that occurred within four weeks of the last injection and twelve weeks' time is usually necessary for immunity establishment. Hence, we do consider that we have controlled the disease at our institution.

Blauner¹¹ reports the occurrence of eight cases of diphtheria among Schick negative children in one dormitory of a New York orphanage. Investigation of these cases shows that in all probability they were cases of septic sore throat, for those receiving antitoxin did not get well any sooner than those who did not receive it. Meyer¹² reports that 94 per cent of 108 cases retained a negative Schick for 44 months. Schroeder¹³ had 22 out of 28 remain negative for five years. Park¹⁴ thinks that a negative Schick after two years of age in all probability means an immunity for life. Only time will answer the question as to the permanency of this immunity, but at present all reports are very encouraging and point towards the beginning of the end of this dreaded disease.

Among the endocrinopaths, the psychopaths, epileptics, paralytics, microcephalics, macrocephalics, or simple types of feeble-minded, we were able to find no appreciable variations in susceptibility or immunization responses.

Conclusions:

1. Administration of antitoxin at the earliest possible moment not only will save life, but will ward off complications and will minimize the necessary dosage.

2. Intubation as an operation needs more attention.

3. Release from quarantine should be granted only after three or more negative cultures carefully taken at consecutive 24-hour intervals from both nose and throat.

4. The Schick test provides an easy means of determining susceptibility.

5. Toxin-antitoxin is efficient in causing an active immunity. Its use in the public schools will do much to reduce morbidity rates, but its use in the pre-school age must be effected before much reduction can be made in mortality rates. Its reactions are worthy of consideration.

6. Within six months after the administration of the toxin-antitoxin the Schick test must be reapplied and the positive reactors given another series of injections or much of the work will fall into disrepute owing to the public's misunderstanding.

DISCUSSION

DR. ADA SCHWEITZER (Indianapolis): It has not been so many years since I worked in the laboratory of the State Board of Health. The work of diphtheria immunization was begun, I think, about seven or eight years ago, as Dr. Harshman said, in the laboratory of Parke. Dr. Parke has had much to say about the effectiveness of this early work which was tried out in a manner similar to that spoken of today. He said their first immunization had been done seven years before I talked to him so he was sure the immunization would last for seven years. Since then Zingher has made some statements about the Schick test in districts where children cannot be kept under close observation. It has been proved that the test should be done at least to test the effect of immunizing doses, for it is not likely to injure the child. Immunization does not always keep the child from being a carrier, and this should be remembered.

In Indiana I think we had about 800 deaths last year from diseases against which those persons might have been immunized, showing that we have not taken advantage of our knowledge in this respect for older persons and children and have not attempted to protect them against disease.

DR. L. P. HARSHMAN (Fort Wayne), (closing): I wish to call attention to the one conclusion of this paper: I stated that 85 per cent. of the deaths from diphtheria occur before the child reaches the fifth or sixth year of life. This is the pre-school age and practically all the work that has been done in this line has been on school children, who usually get well anyway. In order to make this work really practical it must be carried

11. Blauner, S. A.: Diphtheria Among Immunized Children, *Am. Jr. Dis. Child.* 21:472, May, 1921.
12. Mayer, Jacob: Active Immunity with Diphtheria Toxin-Antitoxin, *J. A. M. A.* 78:716, March 11, 1922.
13. Schroeder, M. C.: The Duration of the Immunity Conferred by Use of Diphtheria Toxin-Antitoxin, *Arch. Pediat.* 38:368, June, 1921.
14. Park, W. H.: Does a Negative Schick Indicate Present and Future Security from Diphtheria? *Arch. Pediat.* 38:329, June, 1921.

to the pre-school period, for there is where the mortality lies.

Another point is that if one is going to use this toxin-antitoxin in children it is up to him to use the Schick test six months later in order to confirm or disconfirm his patient's impression that there has been an immunity established against the disease.

GONORRHEAL INFECTION OF THE FEMALE GENITALIA*

DAVID R. ULMER, M.D.

TERRE HAUTE

In looking over the field of infection in the genital tract, it seems impossible to mention any more than a few points, consequently I am limiting this paper to "Gonorrhea of the Female Organs." Just how often it occurs, or what percentage, it is hard to say. Various authors have given different statistics, but it probably runs between sixty and ninety per cent. When it affects the urethra, the disease is slight and attracts but little attention on the part of the patient, since the more serious symptoms of ascending gonorrhea often do not appear for weeks or months after the primary urethritis.

The endocervix holds the second place, while the vagina is rarely infected except in the young. It is only natural and logical that the urethra be first attacked for the fact that the epithelium of the meatus in the female as in the male is a very favorable medium for the gonococcus and is the first point to be exposed during coition, thus the urethra is affected first and the cervix secondly. However, both may be infected at the same time, or the cervix in some cases may be infected first. While I would not attempt to make a diagnosis without the microscope, yet very often the vulva is quite characteristic.

The labia minora and vestibule are reddened, swollen and tender and usually bathed in pus. The meatus is swollen and pouting. Very often from the urethra you can also express pus in which can be found gonorrheal diplococcus in abundance. At this time we should also look for infection of the glands of Skene, and the Bartholin glands. It is always best, before trying to express any pus from these glands, to wipe the field thoroughly and watch for the little beads of pus from the Bartholin glands near the remnants of the hymen.

In some cases a developing urethritis is much the same in the female as in the male with a burning, itching sensation. However, many more cases may only experience a very slight discomfort such as women may experience from concentrated urine. The swelling in and about the urethra, vagina and cervix creates a feeling of pressure and very often a patient thinks she has some malposition of the uterus. The disease has but little

tendency to affect the urinary tract if proper treatment has been carried out. In most cases of acute gonorrhea we find that the disease disappears within three to six weeks but, of course, there is always a tendency to cronicity and when this happens it is usually associated with inflammation of Skene's glands and a long drawn out persistent urethritis. We find these conditions very difficult to cure. Often these cases develop mixed infection and last a long time after the gonococcus has ceased to appear.

The treatment of urethritis and vulvovaginitis is very much the same as treatment in the male. Restricted diet, rest in bed, alkalis, forced fluids and sitz-baths. It is a good thing for a patient to have a hot solution of Potassium Permanganate to sit in for fifteen minutes at a sitting several times a day, at the same time dividing the labia majoria. When acute symptoms subside then silver nitrate or some of its preparations may be used through the endoscope in the urethra, or you can use an ordinary urethral syringe, the same as used by the male. If the bladder is involved and cystitis has developed you should irrigate the bladder. I have made it a practice to leave one ounce of a 10% Argyrol solution in the bladder. Treatment of the bladder given every day if possible. If there are erosions or patches of congestion, I use a 3% cocain to the surface of the urethra and then a 2% silver nitrate solution to affected parts. The pudential hair should be kept scrupulously clean with soap and warm water and an alkaline solution. For treatment of the cervical canal, place a speculum, sponge the vagina dry and clean the cervical canal. I use a small cylindrical brush made for cleansing test tubes for the cervical mucous plug, then take a pledget of sterile cotton dipped in 2% silver nitrate and swab the entire vagina, also using a small swab of 4% solution in the cervical canal, then placing a tempon thoroughly saturated in 2% silver nitrate solution. If you are unable to see the patient every day there are many suppositories of silver nitrate on the market you can allow the patient to use. First use a hot normal salt solution followed by a sterile douche and then the suppository.

I might say in passing, we very rarely have a stricture in the female urethra, and when we do have one it is treated very much the same as in the male. The Bartholin glands may become infected primarily, but this is rare and they are very rarely infected by another organism than the gonococcus, consequently when you find a Bartholin abscess you can nearly always class it on the gonococcus side. The infection usually takes place in ducts and then travels to the glands themselves. These are racemose glands and are very good soil for gonorrhea. These, too, often become infected with other pyogenic organisms. In time these organisms kill out the gonococcus and will extend to the middle part of the gland and an abscess is the result. We most often find only one gland infected, but occasionally both.

*Presented before the General Meeting of the Indiana State Medical Association at the Terre Haute session, September, 1923.

I want to speak of another thing before leaving the Bartholin glands and that is its treatment. Do not think when you have stuck a knife into the abscess you have cured the patient. If you do you will relieve the present condition but more often than otherwise you will have another abscess and another operation and so on. For the past six or eight years I have made it a practice to dissect out the glands entirely and then you are through with them. However, occasionally you may have a very slow process of healing, due to the gonococcus and other pyogenic organisms, but when the wound has once healed you have cured the patient. It is always best to dissect out the gland without spilling the pus, if possible. However, in many cases you will find the limiting membrane is already necrotic. If it is impossible to dissect the gland abscess, you can at least cauterize the wound.

During the interim between the abscesses very often it is difficult to find the gland, owing to the fact that the gland has so regressed in size that it is hard to palpate. It is not a very good procedure to operate at this time. We often find cysts of the Bartholin glands due to an old Bartholinitis where the duct has been occluded and the secretions of the glanular cells may cause a retention cyst. These also are usually the stigmata of gonorrhea and should be dissected out the same as the abscessed glands, for the fact that they interfere with coitus and are an annoyance to the patient. These operations are not simple and should be done under a general anaesthetic. The incision should be made through the true skin. A deep, thorough incision must be made and the gland thoroughly dissected out with all aseptic precautions. You may think that these are little things to mention, but we see many patients who have had one, two and three incisions made into the gland at different formations of the abscess and later they will go to another doctor and ask why they have a recurrence. Consequently these glands should always be excised.

I will now speak of infections in the endocervix, and may I be pardoned if I mention a few facts which have been treated too lightly by the profession, and that is, differentiating the endometrium from the endocervix. We might say that the uterus and cervix are two distinctly different organs. The mucous membrane of the cervix is very different from that of the uterus. We find in the endocervix the membrane is made up largely of racemose glands whose small ducts empty into the cervical canal. The epithelial lining of these glands is of the cylindrical and goblet type. They secrete a true mucous, consequently they are easily affected by the gonococcus. As a rule the internal os acts as a barrier to all organisms except the gonococcus, the tubercular bacilli and the spermatozoa unless, however, it has been largely dilated by force or by parturition. In such cases it is very easy for any pathogenic organism to make its entrance. As a rule we find the endo-

cervix infected either primarily or secondarily, producing an endocervitis which causes a rather angry looking eversion and prominence of the mucous membrane. It is very often tender to touch, and causes some pain in the inguinal lymphatic glands. You will always find a profuse gonorrheal discharge mixed with mucous from the cervical glands. Menstruation is very often disturbed in three ways—with reference to the time in the month which is irregular, the number of days of flow usually is prolonged, and sometimes a menorrhagia. When you are making a smear never try to make it from the deep vagina for the fact that the gonococcus is hard to find except when the smear is taken from the acute vulva, Skene or Bartholin glands and the cervical canal. As stated before it is rare that the tough vaginal wall, which has no glands and has the pavement epithelium, will allow itself to become infected.

Chronic endocervicitis is a very different proposition to the acute. We find that the gonorrheal infection of the endocervical mucous membrane simulates the glands in that the infection occurs in the acute and then sometimes later we have the other organisms which develop in the same glands gradually replacing the gonococcus. From this the infection is carried into the racemose glands, developing a hyper secretion until a stream of mucopurulent material is continuously poured into the cervical canal, thus producing a marked leukorrhea and sterility. That is, sterility by blocking the cervical canal. Sometimes the ducts from the glands become closed and develop retention or Nabothian cysts. These Nabothian cysts are filled with either clear or cloudy mucous pus, and let me say just here, that I believe the time will come when we will look upon Nabothian infection much as we are looking upon tonsillar infection today. Do not think that all cases of endocervicitis is due to gonorrhea. There are many conditions such as laceration from child-birth, bacteria and trauma that may cause an endocervicitis. When we find a chronic gonorrheal endocervicitis it resembles, somewhat, gleet in the male with its persisting irritating discharge.

These conditions often irritate the patient, making her nervous, cross and feel that something very radical is wrong far out of the true condition. The treatment of these conditions is directed to the endocervix and should not be simply with some bland solution. The cervix should either be cauterized thoroughly or curetted thoroughly and then cauterized. If these methods fail an operation should be performed by some of the various methods, which are many.

We find often that the gonococcus makes its accent through the uterus over the endometrium and into the tubes. The endometrium seems to be peculiarly immunized from these diseases, but it serves as an efficient bridge for the gonococcus to the tubes. It is so rarely affected that I do not feel that it is worth our time to stop here to discuss it. I wish to state what Murphy said many

years ago, "that the gonococcus goes over the tissues and lodges in the tubes while the staphylococcus goes through the tissues and lodges in the parametrium." Gonorrhea seldom enters the tubes immediately after gonorrheal endocervicitis. Sometimes it is several months or even years before it affects the tubes. The tube isthmus, although small, is an open portal to the gonococcus.

With the infection of the tubes the mucous-membrane becomes swollen and reddened. The lumen is bathed with an exudate which becomes purulent according to the severity of the infection. The tube becomes straightened out and thickened. The extremities closed. At this point we call the condition a catarrhal salpingitis. This condition may continue on to a typical pus tube to be limited to its present condition or one tube may go on to a pus tube while resolution may take place in the other. As a rule both tubes are infected. As the disease goes on the muscosa becomes shorn of its cilia, the ruga becomes straightened out and are often ulcerated, while the walls of the tube become thicker as the inflammation extends into the muscularis. At this state an exudate is thrown out and the tube may become adhered to any of the surrounding tissues and especially to the germinal epithelium of the ovaries. The exudate from the tubes very often flows over the surface of the ovary and the fimbriae becomes attached to the ovary. This is very disastrous to the ovary for the fact that it may include the entire ovary. When the end of the tube is intimately attached to the ovary the pus may enter the substance of the ovary itself and destroy at least a part of its tissues.

The corpus luteum makes an excellent bed for the invading gonococci as the tube becomes adhered on the surface of a regressive corpus luteum, the corpus becomes involved with the tubal abscess, thus the abscess sac is composed of the tubal wall and stretched with ovarian tissue, making the tube ovarian abscess. While the ovary is permanently damaged and cannot be restored to former condition, the ovulation and menstruation will continue still. Another condition we find is when the gonorrheal salpingitis is limited and does not go on to suppuration but where the ostia are closed and the tube is filled with a clear fluid and consequently we have the hydrosalpinx. You remember when we were taught that hydrosalpinx was the decline and disappearance of the active pyogenic organisms and perhaps some men still cling to the same belief, but most of the gynecologists believe in the aborted gonorrheal infection of a tube and, consequently, a hydrosalpinx.

With the developing salpingitis and pus tubes you have many other intra-abdominal and pelvic conditions to think about. Probably the history of pus tubes resembles the history of appendicitis or a diverticulitis more than most any other condition with which you meet in the abdomen. How-

ever, by taking a very close history you will find quite a differentiation between the appendix and pus-tubes. With appendicitis you will find that the pain develops in the upper abdomen, very often in the left hypochondriac region; later, localizing at McBurney's point, while the pain with pyosalpinx is always in the pelvis and usually bilateral. Attacks of appendicitis come on more often after indiscretion in eating, while pus tubes usually develop near menstruation, just before or after. There is more marked vomiting in appendicitis than in pus tubes. There is more marked rigidity of the recti, especially the right rectus, in appendicitis. The leukocyte count is higher in appendicitis and the patient often lies on the affected side with the right leg usually drawn up.

On physical examination you must differentiate between pus tubes, all pelvic tumors, simple ovarian abscesses, retroversion and retroflexion, pelvic cysts, broad ligament abscesses, etc., all of which gives you a rather fixed uterus. When I find a fixed uterus I feel sure that I have some pelvic pathology. It is not always easy to differentiate the different conditions found in the pelvis. As stated before, the gonorrhea goes over the tissues and lodges in the tubes, while infections from abortions, retained placenta, etc., go through the tissues and lodges in the parametrium, thus developing the pelvic abscess. To differentiate between pus tubes and pelvic abscess you will find that the pus tubes usually extend out into the iliac fossa, while pelvic abscess usually is posterior to the cervix, especially when it has thoroughly focalized and you get fluctuation. Retroverted uteri can be easily lifted into position and a mistake need not be made. With small fibroid tumors or pregnancy, the mass is in the center and the uterus is fairly well movable. As far as treatment of pus tubes is concerned, I feel that they should be removed after all symptoms of acute inflammation have disappeared, perhaps six months to a year after the infection of the tube. I might also add that while removing the tubes I try to remove all infected ovarian tissue and, very often, with consent of the patient, I do a superpubic hysterectomy, leaving a small portion of the cervix and usually cauterizing its canal, or else do a total hysterectomy, for the fact that these cases where you leave the uterus or even the cervix, has a profuse discharge for years which often annoys the patient and sometimes irritating the outside parts.

DISCUSSION

DR. J. R. YUNG (Terre Haute): I suppose gonorrheal infections produce more pathology of the female generative organs than the traumatism of confinement or abortion. An acute gonorrheal infection may escape notice, but the chronic condition is much more frequently overlooked.

In doing surgery for women it is frequently necessary to catheterize. No matter how carefully done it carries the infection from the urethra into

the bladder, producing a cystitis which is frequently far more annoying to the patient than the disease for which the woman was operated. Therefore, I make a plea for careful examination to determine gonorrhoea in women. In making a vaginal examination we should be careful to see if there is any pus, and if so to make a microscopic examination of it.

Where glands are involved which cannot be cured by injection, then I think incision of the gland should take place. To treat the cervix

without first carefully swabbing out the mucous plug is worthless. I think the method suggested by Dr. Ulmer of removing the plug with a brush is good. There is a brush on the market for that purpose.

Dr. D. R. ULMER (closing): In this paper I simply mentioned the main points. I did not have time to discuss each one. As a rule I never leave a uterus in an old chronic salpingitis. There will be a discharge for years which is irritating and obnoxious to the patient. If I do, I cauterize the uterus and the cervical canal.

THE ABSORPTION OF DRUGS

There seems to be a more or less general assumption that if a drug is soluble in water it will be absorbed in a satisfactory manner when introduced into the alimentary canal or injected into the subcutaneous or intramuscular tissues. A few seem to take the opposite stand, namely, that most drugs are absorbed so poorly from any channel of administration that, to secure therapeutic effects, they must be injected intravenously. Both of these views, according to Cary Eggleston, New York (*Journal A. M. A.*, Aug. 11, 1923), are obviously erroneous. The matter of solubility of a drug in water, he says, bears no necessary relation to the question of its absorbability from the gastro-intestinal tract. Food may retard absorption, through too great dilution of a drug; by the large amount of colloid present; by combining with the drug to form a less absorbable compound, or in other ways. No general rules can be laid down as to the influence of meals on the absorption of drugs, hence this factor must be determined separately for each drug. The increased circulation during digestion may facilitate absorption, and it is probable that mild degrees of congestion from other causes have a similar effect. Several drugs have been shown to be absorbed more promptly when administered in dilute alcohol than when given in water. Other mild irritants, by inducing slight local congestion, will probably be found to produce the same result. If the drug itself is irritant, this property may facilitate its absorption if it is administered in sufficiently dilute solution. Higher degrees of local irritation, however, seem to delay absorption. Whether this is due to injury to the epithelium is not known, but such a mechanism seems probable. Local ulceration of the mucosa, on the other hand, may enhance the absorption of some drugs, especially those toward which the membrane is normally more or less impermeable. Anemia of the alimentary canal probably always impairs absorption of drugs as well as of the products of digestion. The rate of absorption after oral administration may be determined for man in different ways. The degree of uniformity of absorption is just as important as is the rate.

Some drugs seem to be taken up from the rectum quite as rapidly and as effectively as when given by mouth, some possibly better; but most are probably much less satisfactorily absorbed. The liver is capable of fixing and destroying or otherwise eliminating a great many drugs. This fact has been used as one of the arguments against oral administration, as compared with other methods, since drugs so given generally enter the systemic circulation only after initial passage through the liver. Even with a drug that is fixed or destroyed rapidly, a more or less considerable proportion usually will escape change in the liver and enter the general circulation. The oral dose of such a drug will, therefore, merely have to be made sufficiently large to allow for the portion which is destroyed during the first passage through the liver. The assumption that liver fixation or destruction is a serious bar to effective oral administration is not warranted by the common experience of therapeutists. The relation between the rate of elimination and the duration of action of a drug on the one hand, and the rate of its absorption from different channels of administration on the other, determines the mode of administration, the dosage and the frequency of repetition of drugs, except for those few agents whose actions may prove life-saving in circumstances of great urgency, such as strophanthin in cardiac failure and epinephrin in shock. Until much more definite information is available, oral administration must unquestionably remain the most satisfactory and the most precise method. The dose of a drug may be defined as that amount which will just suffice to produce the desired effect in a given patient under the particular existing conditions. This dose cannot be known in advance, for it is not the same in different patients, nor even in the same patient at different times. By oral administration, fractions of this dose can be given as often as necessary, until the desired dose is absorbed and the action sought has been developed. By varying the size of the fractions and the frequency of repetition, the required dose can be approximated with greater certainty and precision than by any other method, and the rapidity with which the effects are developed may also be controlled with some degree of accuracy.

THE JOURNAL*of the***Indiana State Medical Association**

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, JR., B.S., M.D., F.A.C.S.

Editor and Manager

Office of Publication, 406 W. Berry St., Ft. Wayne, Ind.

DECEMBER, 1923

EDITORIALS**POSTGRADUATE WORK BY OUR MEDICAL SOCIETIES**

At no time during the history of medicine have there been as many advances made in the knowledge of the etiology, diagnosis and treatment of disease as have been brought about during the last few years. The enterprising and studious medical man has kept abreast of the times by extensive reading and by contact with teachers and men of large clinical and laboratory experience, but this does not hold true with the rank and file of the profession, for a very large proportion of the medical men of this country who graduated a few years ago are way behind the times. In most instances this is due entirely to lack of initiative. Many medical men are not enterprising or studious, but apathetically fall back upon an attitude of complacency and self-satisfaction which utterly fails to meet present day requirements when the people desire and are entitled to the best results. The doctor who graduated fifteen to twenty-five years ago is a back number in every sense of the word unless he has taken time to read the best medical journals and latest medical books, and has taken advantage of and profited by the opportunities offered to do postgraduate work. Many doctors do not even wish to attend their local medical society meetings but flatter themselves that they are as good as their confreres and consequently nothing can be learned through contact with their immediate associates. This is false reasoning and really speaks volumes in defense of a proposition that the man who is self satisfied is always ignorant.

What we need is an increased interest in postgraduate work, whether it be in connection with the clinics given in medical centers or the work done by our medical journals and medical societies. An increasing number of hospitals and their standardization according to rules laid down by the American College of Surgeons is doing much to improve the standing of the medical men who are connected with those hospitals and for the reason that the weekly or monthly staff conferences helps to broaden the men connected with the hospitals, but there are a great many men not connected with the approved hospitals who need similar educational advantages. For them the

best medical journals and medical books are not sufficient, and they need good medical societies and good postgraduate courses that can and should be brought to their very doors. A live medical society is a great educational factor, but the postgraduate course, supplemented by clinics, is of greatest value in furnishing a practical education that can be absorbed by any one.

This leads up to the question we have to propound to our medical societies and the district medical societies in particular. Why not have real postgraduate programs, supplemented by dry clinics, and take at least two or three days for it once or twice a year in every district in Indiana? We have able men in the state who can help in carrying out such programs. In fact, if they were not capable and well posted themselves they would not dare to undertake such a task, though it is possible to secure outside talent in making a program especially attractive. A live committee could get up a program that would be so inviting that every man in the district, who has the slightest conception of his duty to himself and his patients would feel that he could not miss it. No long-winded men should be permitted to take part in the program, and theoretical discussion should be barred. Talks or papers should be concise, practical in their nature, thoroughly up-to-date and well illustrated by clinical cases.

LONGEVITY OF HUMAN LIFE

Every once in a while the newspapers give prominence to the supposed unusual longevity of some person who has lived to be more than one hundred years old. Perhaps the last one to secure such prominence was "uncle" John Shell, of Kentucky, who is pictured with his last wife and supposed four and a half year old son. According to Pearl, in his monograph on the "Biology of Death," this poor old man was exhibited as the "oldest living human being" at a claimed age of 131 years, whereas, as a matter of fact, Nascher (Amer. Med. N. S., p. 151, 1920), who has made a careful investigation of the case, finds Shell to be "about 100 years old, possibly a year younger or older." The paternity of the four year old boy, though claimed by Shell, is in considerable doubt.

T. E. Young, who has given longevity careful study and published a monograph on the subject, (On Centenarians; and the Duration of Human Life. London, 1905) states that the absolutely authentic instances of human survival beyond a century are, contrary to the prevalent view and customary statistics, extremely rare. He has made the most painstaking and accurate investigation of the frequency of occurrence of centenarians that has ever been made. He points out that the evidence of great age which is usually accepted by the census officials, by registrars of death, by newspaper reporters and by the general

public is, generally speaking, of no validity or trustworthiness whatever. Statements of the person concerned, or of that person's relatives or friends as to extreme longevity almost invariably can be shown by a little investigation to be extremely unreliable. To be acceptable as scientific evidence any statement of great age must be supported by unimpeachable *documentary* proof of at least the following points:

a. Date of birth, or of baptism.

b. Date of death.

c. The identify of the person dying at a supposed very advanced age together with the identity of the person for whom the birth or baptismal record, upon which the claim of great age is based, was made out.

d. In the case particularly of married women the date of marriage, the person to whom married, and any other data which will help to establish proof of identity.

In presumptive cases of great longevity, which on other grounds are worthy of serious consideration, it is usually in respect of item "c"—the proof of identity—that the evidence is weakest. Every student of genealogical data knows, as pointed out by Pearl, how easy it is for the following sort of thing to happen: John Smith was born in the latter half of the eighteenth century. His baptism was duly and properly registered. He unfortunately died at the age of, say 15. By an oversight his death was not registered. In the same year that he died another male child was born to the same parents, and given the name of John Smith, in commemoration perhaps of his deceased brother. This second John Smith was never baptized. He attained the age of 85 years, and then because of the appearance of extreme senility which he presented, his stated age increased by leaps and bounds. A study of the baptismal records of the town disclosed the apparent fact that he was just 100 years old. The case goes out to the public as an unusually well authenticated case of centenarianism, when of course it is nothing of the sort.

Young (On Centenarians, 84, London, 1905) shows that the mortality experience of insurance societies and an investigation of the records of over a million subjects shows that exactly thirty persons up to the time of investigation had lived one hundred or more years, and that the most extreme authentic case of longevity up to that time was about one month and a half short of 111 years. In his table of authentic instances of

centenarianism he gives the ages of centenarians as follows: One each for 110, 108, 105 and 104 years; four at 103 years; seven at 102 years; eight at 101; seven at 100 years. The contrast between these proved findings of Young, exceedingly modest both in respect of numbers and extremity of longevity, and the loose data on centenarianism which one can find in any year's mortality statistics, is striking. For instance, in the registration area of the United States there were recorded in the year 1916, out of a total of over one million deaths, at all ages, a total of 649 who died at ages one hundred or over. In this large total, four persons were recorded as having died at the age of 120, and one, a colored female, at the preposterous age of 134. The reliability of these

statistics is questioned, and the need for more accuracy in our vital statistics is indicated.

Physicians of Indiana Please Note:

FIRST CALL

If You Were the Entire Legislature and
Also the Governor of Indiana, Would
You Pass and Sign a New Medical
Practice Act After You
Convened on January
1, 1925?

IF SO, HOW WOULD THAT ACT
READ?
OR WOULD YOU SIMPLY AMEND
THE PRESENT ACT?

Your committee, under instructions from the House of Delegates, is about to prepare a medical practice bill (or amendments to the present Act) for the next legislature. This is to be done unhurriedly and with a great deal of care.

The only thing your committee has thus far decided upon is that it wants constructive suggestions from YOU—RIGHT NOW. Your ideas may be the ones that will stand the acid test.

The importance of us all backing enthusiastically one solid measure that has been well thought out can hardly be over-estimated.

We would appreciate your sending your ideas to the chairman of the committee—RIGHT NOW.

FRANK W. GREGOR, M. D.

725 Hume-Mansur Building
Indianapolis, Indiana

Chairman, Committee on Public Policy and
Legislation

FELLOWSHIP PLEDGE OF THE AMERICAN COLLEGE OF SURGEONS

A reader of THE JOURNAL has asked "What are the requirements for admission to the American College of Surgeons and what is the pledge about which we hear so much?" The inquiry could be answered better and more comprehensively by the secretary of the American College of Surgeons, who has his office in Chicago. Briefly stated, the requirements for admission in the College are as follows: The applicant must be well educated, well trained, and have had considerable experience in the practice of some

branch of surgery to which he is devoting the major portion of his time. He must bear a reputation among his fellows for good professional work, and his general reputation for integrity and general conduct must be good. Aside from all this he must sign a pledge, which as an honorable gentleman he will live up to, putting him on record as complying with certain conduct which every honorable medical man should be willing to uphold. The pledge of the American College of Surgeons is as follows:

Recognizing that the American College of Surgeons seeks to develop, exemplify, and enforce the highest traditions of our calling, I hereby pledge myself, as a condition of Fellowship in the College, to live in strict accordance with all its principles, declarations, and regulations. In particular, I pledge myself to pursue the practice of surgery with thorough self-restraint and to place the welfare of my patients above all else; to advance constantly in knowledge by the study of surgical literature, the instruction of eminent teachers, interchange of opinion among associates, and attendances on the important societies and clinics; to regard scrupulously the interests of my professional brothers and seek their counsel when in doubt of my own judgment; to render willing help to my colleagues and to give freely my services to the needy. Moreover, I pledge myself, so far as I am able, to avoid the sins of selfishness; to shun unwarranted publicity, dishonest money-seeking and commercialism as disgraceful to our profession; to refuse utterly all money trades with consultants, practitioners or others; to teach the patient his financial duty to the physician and to expect the practitioner to obtain his compensation directly from the patient; to make my fees commensurate with the service rendered and with the patient's rights; and to avoid discrediting my associates by taking unwarranted compensation. Finally, I pledge myself to co-operate in advancing and extending, by every lawful means within my power, the influence of the the American College of Surgeons.

DOCTORS GET TRIMMED

The Consolidated Theaters Corporation, ostensibly owning theaters and other property in several Indiana cities, is in the hands of a receiver, and the current gossip is that much evidence will be produced to show that misappropriation of funds and various forms of financial juggling, if not actual crookedness, is responsible for the collapse of the enterprise. This would not merit comment except for the fact that a large number of doctors of Fort Wayne, Evansville, Terre Haute, Richmond and some other cities of the state were investors in the enterprise and stand to lose all they put in it, in some instances the amount being several thousand dollars. From its beginning the enterprise gave evidence of being of questionable repute, but in spite of warnings on the part of better business bureaus, bankers, and shrewd investors, dupes by the hundred, many of them doctors, were induced to invest on the promise of big returns. The concern underwent a reorganization in 1920, undoubtedly with a view of covering up questionable operations, and success

attended the efforts of the promoters to increase the holdings of those who already were stockholders, notwithstanding the fact that those in a position to judge openly charged that the enterprise was unworthy of trust. Even THE JOURNAL in 1920 pointed out that doctors would be unwise in buying stock in the concern and gave as a reason that the promoters refused to give a statement of assets and liabilities or to furnish any information as to how the enormous amount of money secured from stockholders was being expended. In spite of all warnings from every source, a large number of doctors figuratively speaking "swallowed bait, hook, sinker and all," and purchased the more or less worthless obligations of the reorganized company or corporation. Probably they are now sadder but wiser men, and yet it is a question if they will not turn around soon and bite at something else equally as attractive but at the same time just as unworthy of confidence, for "a sucker is born every minute" and crooked promoters give doctors first place in their sucker lists.

Seemingly a doctor who has a little money to invest never looks around for a sound and safe investment right in his immediate community, and he never thinks of asking advice from his banker or some one else who makes a business of dealing in securities and who has a reputation for trustworthy judgment, and fair dealing. In consequence he gets trimmed. He looks with pity upon the average citizen who goes to a quack doctor or member of a pseudo-medical cult for health advice or treatment of disease, but he shows equally poor judgment himself by taking investment advice from impostors and crooks. We only can urge upon those who are thinking about putting their money into something from which they expect to get a return to follow the slogan of some of the better business bureaus, "Investigate before you invest." If you can't do this yourself, get someone else to do it for you. Find out where your money is going, for what it is going, and make sure that you are not putting up for watered stock, or for property of any description that has an inflated value. Lastly, determine that the promoters are men possessing a reputation for business ability and integrity.

CHIROPQUACKTIC MALTREATMENT

In the correspondence columns of this number of THE JOURNAL we publish a letter from a well known and reputable physician which recites evidence to show that chiropractic treatment as generally employed possesses elements of danger because it is based upon the height of ignorance and absurdity, and because there are various kinds of chiropractic treatment not the least of which is an effort to increase the population while ostensibly endeavoring to treat disease. From a private source we learn that the chiropractor in question not only insisted upon giving frequent treatments,

which he urged upon the parents as being absolutely necessary in order to bring about recovery of a sick daughter, but he also insisted that prior to each treatment the money for the treatment should be in plain sight and accessible. As the evidence shows, it would have been better had the mother been in plain sight also, for it was bad enough to have a daughter suffer from maltreatment given on the pretext of curing her of a disease, without also having her suffer from the loss of her virtue.

Just when will people learn that purulent appendicitis, abscesses, tumors, leaky hearts and a hundred other serious ailments, not omitting pregnancy, require the services of a skilled physician and cannot be relieved, much less cured, by *chiroquacktic* manipulations. As we have stated many times before, quackery of any description never will be suppressed, much less wiped out, until the people learn that education and training are absolutely necessary for any man who is to be permitted to treat the sick. To let a chiropractor tinker with the human body is like letting an umbrella mender try to mend a fine and expensive Swiss watch. Perhaps our new department of publicity of the Indiana State Medical Association will do something toward educating the Indiana people concerning this matter. It would seem rational to believe that about all that is necessary is to prove to the people by analogy that education and training for medical practice means something more than tickling, rubbing or in any way manipulating the spinal column.

MEDICINE PRESCRIBING SPECTACLE VENDERS

Through newspaper reports we learn that a firm of jewelers in Evansville is being prosecuted for practicing medicine without a license. The specific charge recites that a woman had her eyes treated by the jewelers, presumably in connection with the adjustment of glasses. It seems that the prosecuting attorney was not very keen about entering prosecution unless it could be demonstrated that the jewelers were not licensed as optometrists, though we hardly see what difference that makes. As a matter of fact many Indiana optometrists, jewelers and spectacle vendors of every description have not hesitated to prescribe medical treatment for diseased eyes of their patrons. Some optometrists even write prescriptions for eye drops of various kinds, and the strange part of it is that some licensed druggists do not hesitate to fill such prescriptions. We have known some patients having progressive eye diseases who have neglected to secure competent and necessary medical advice because they were placing their dependence upon medicine furnished

by some optometrist or jeweler. We know of two or three specific instances where patients suffering from glaucoma, and needing skilled attention promptly in an attempt to retard the progress of the disease, have wasted time and money for weeks while putting their faith in eye drops prescribed by some spectacle vender wholly ignorant of eye diseases.

The lamentable feature of this abominable business is that the public looks upon it with such complacency, and even prosecuting attorneys hesitate about prosecuting offenders if the offenders are prominent in politics or business. Naturally the medical profession is interested in enforcing laws, but why should the medical profession be called upon to file affidavits in such cases as the ones under discussion, and if medical men do file affidavits isn't it generally thought that it is a case of persecution rather than prosecution as long as public sentiment is as it is now? On the other hand, when we know what a penalty the public pays for permitting medical outlawry of any description, why isn't it a good plan to have the moral backbone to help bring the criminals to justice? We know that it will be difficult to secure convictions, for here in Indiana there certainly is a good deal of contempt for medical laws, and so far as the public is concerned we would be just as well off if we had no medical laws. About the only thing a medical law in Indiana does is to make it difficult for a well trained and legitimate medical man to obtain a license to practice, but why get a license except as a means of complying with some of the legal requirements in an endeavor to get into the good company offered by a regular medical society. Indiana is a dumping ground for quacks and charlatans of every description and they practice in this state without let or hinderance. This is not the fault of the present board of Medical Registration and Examination, but is due to a general indifference on the part of the public to law enforcement as it pertains to the healing art, and with it a reluctance on the part of prosecuting attorneys to bring action against offenders. The Board gets sick and tired of prosecuting when it fails to secure conviction, and perhaps it is just as well to let the public come to the conclusion that it needs protection, and then there will be some respect for the medical laws we already have.

BUILT TO ORDER

"What's the matter with Smith? Got lumbago or spinal curvature or something?"

"No, he has to walk that way to fit some shirts his wife made for him."—*Exchange*.

IMPOSSIBLE

Doctor—"Put out your tongue—more than that—all of it."

Child—"But, doctor, I can't. It's fastened at the other end!"—*Le Rire* (Paris).

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely FREE to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve YOU.

To the members of the Indiana State Medical Association THE JOURNAL extends the Season's Greetings and best wishes for the coming year.

INDIANA doctors will be pleased to know that Dr. Franklin W. Cregor, of Indianapolis, has been appointed by President Wilbur to fill a vacancy on the Judicial Council of the American Medical Association. Dr. Cregor is of an analytical and judicious turn of mind and will prove his value to the American Medical Association.

PLEASE remember that your dues for 1924 are seven dollars. They are payable now. Don't delay prompt settlement. There is nothing to which you contribute that gives you more real return and, in all probability, the expense is but a small fraction of what you spend frivolously without anything worth while to show for the outlay.

EVERY doctor owns an automobile and should carry indemnity insurance. Every member of the Indiana State Medical Association now has the opportunity to secure trustworthy indemnity insurance at a marked saving in the cost. The advertising pages carry an announcement of the plan as approved by the House of Delegates at the Terre Haute Session.

NOTWITHSTANDING the fact that the entrance and graduation requirements of the Indiana University School of Medicine have been increased during the last few years; there has been a steady increase in the enrollment of students, and today the school not only stands out as one of the best A grade schools, but one that is sought by students from not only Indiana but surrounding states as well. This speaks well for our University authorities, who at all times have worked for higher standards.

A COMPLIMENTARY dinner given by some fifty friends and associates of Dr. George W. McCas-

key, of Fort Wayne, in celebration of his seventieth birthday, was a deserving recognition of those who know him best. It is quite true that men are honored during life much in accordance with their desserts, but the old saying, "Honor save in your own country," applies so generally that the average man considers that the tribute paid by his closest associates and friends is the greatest tribute of all and the one most appreciated. We have a habit of eulogizing men after they are dead, but if deserving of it, why not pay tribute to them while they live?

RATS are a real pest in the sugar cane fields of Hawaii. A new method of extermination seems to be working successfully. It consists in distributing poison cakes through the fields and non-cultivated areas. The poison used is barium carbonate, mixed with dough and made into small cakes which are coated with paraffin to protect them from dampness and molding. These cakes are distributed about ten feet apart over the infested area, and repeating the process three or four times a year is said to effectually control the pest. Possibly this method of extermination will apply in other places with equal success, though no infested regions in our cities and towns can be rid of rats without cleaning up and destroying refuse. Sanitary police by enforcing clean-up rules could do much to control the rat pest.

SOME states have a special physician's automobile license plate which carries an insignia recognized by traffic officers and others as indicating that the owner of the car carrying the plate is a physician. It is said that this plate prevents theft of the car, though we scarcely believe that thieves pay much attention to a license plate when they want to steal a car. Anyway, we are wondering why Indiana cannot have these special plates for physicians. In fact, it wouldn't be a bad idea if a certain number of plates, bearing an insignia of the medical profession, could be reserved in consecutive numbers, and let that fact be generally known so that traffic officers, deputy sheriffs, and others, could recognize a doctor's car by the number as well as by the insignia. Perhaps some of our Indiana doctors would like to take up this question with our automobile licensing department of the state.

THE New York State Department of Health sends out health news by radio. Recently the public has been urged to eat fresh raw fruits every day in the year, and in the interest of local fruit growers Eastern people are urged to buy fruit that grows in the East. Concerning apples the radio-health talk concludes as follows: "Eat them now; eat them during the winter;

eat them until apples come again." We are reminded of the old saying "An apple a day keeps the doctor away," and after all there is a fair margin of truth in the saying, for fruits are sources of mineral salts so necessary for digestion in all life processes. It may not be generally known to many Indiana people that some of the finest apples on the market, with delicious flavor, are grown right in Indiana, and we might with propriety follow the example of New York and ask our home people to eat Indiana apples.

THE Bureau of Information of the Indiana State Medical Association will be in full operation at an early date. The expense is borne by the Association, and the creation of the enterprise is responsible for the recent raise in the dues. The function of the Bureau is to educate the public concerning the aims and policies of the regular medical profession, and what has been accomplished by scientific medicine in lowering the mortality from disease, preventing sickness and prolonging human life. Not a little effort will be put forth to offset by publicity the dangerous propaganda spread by the quacks, charlatans and pseudo-medical cults. The Bureau deserves and should have the cooperation and support of all of the members of the Association to the end that the public will have a better conception of what has been accomplished in the past and what will be accomplished in the future by properly educated and trained medical men.

THE board of trustees of the American Medical Association has authorized a reduction of the annual Fellowship dues, including a subscription to *THE JOURNAL*, to five dollars per annum to take effect January 1, 1924. Perhaps this reduction is justified in view of the reserve on hand, and yet we cannot help feeling that some of the activities of the Association may have to be curtailed as a direct result of a reduction in the amount of the annual income. There also is the question of increased activity, perhaps in new fields, to be considered when the budget of expenditures is made up. Notwithstanding the fact that some doctors continually are howling about the amount of dues they pay to medical societies yet we believe that most of the men worth while would prefer that the dues to the A. M. A. remain what they are now, and the increasing surplus be used in new fields of activity, especially in carrying on those enterprises which are of direct benefit or assistance to the individual members of the Association.

A PROMINENT clergyman once said to us, "Every intelligent person has enough ideas in him to make one good sermon, but he would be absolutely helpless if he had to prepare one hundred or more sermons a year as do we clergy-

men." The truth of this saying comes home to us when we hear some doctors kicking about one or more editorial products of a medical man who tries to furnish editorials; editorial notes and give editorial management to the production of a periodical that must come from press regularly and at the same time the aforesaid editor is attempting to care for his private practice and perhaps attend church and prayer meeting on the side. As a matter of fact, a medical journal can be made better through the support and constructive criticism of its readers, and medical problems of every description are best solved through the cooperation of the profession as a whole. Therefore, if a reader has a personal opinion that is not selfish he is welcome to disseminate that opinion through the columns of *THE JOURNAL* and thus record a judgment that may aid in improving conditions. In other words, don't stand on the side lines and kick, but give your active support and your assistance in working for the betterment of everything that pertains to medical men, and the things that they represent and in which they are interested.

IN this number we print an original article which is interesting because it points out the varying practices of a majority of the physicians in a given small community in treating diphtheria. The findings seem to prove the contention on the part of up-to-date public health officials that a very large percentage of the doctors doing private practice are twenty years behind the times. We profit by experience, but the trouble with most physicians is that they start in with some idea, whether given by others or preconceived, and seem satisfied with it, even refusing to modify opinions in the face of progress that has been brought about through greater experience than theirs and the increased knowledge that comes through analysis of results. At the present time there are well settled ideas concerning the prevention and treatment of diphtheria based upon extended experience on the part of those who have given the subject intensive study and are able to correlate results and draw from them definite conclusions. One of the outstanding features of our knowledge concerning diphtheria is that the disease is almost wholly preventable, and that the mortality should be negligible if proper treatment is instituted sufficiently early. There is no excuse for such practices as are followed in the average community. All of which leads to the conclusion that it is time for a large proportion of the doctors in every community to awake to the realization that they are behind the profession in progress that means prevention of sickness and a lowering of the death rate.

THE work of the National Board of Medical Examiners deserves favorable consideration at the hands of all of the State Boards of Medical

Examiners to the end that every state in the Union will accept the certificates of the National Board in lieu of their own examination of candidates for licensure. In some states it will require amendments to medical practice acts in order to give state boards authority to take discretionary action. We do not know whether this is true in Indiana or not, but, as a matter of fact, the certificate of the National Board should be accepted in Indiana, for there isn't a question of doubt but that candidates who have passed the examination of the National Board are qualified to meet the educational requirements of any state, no matter how rigid. In fact, if we can judge by the character of the examinations given by the National Board, it is quite within the range of possibility that no state has as exacting requirements. The very high standing of the medical men who comprise the National Board is a guarantee of the high standard that is maintained. It is to be hoped that in the near future it will be possible that any American physician who holds a certificate from the National Board will be permitted to practice medicine in any state or territory of the United States without going through anything more than the formality of registering in the locality where he desires to practice. Some states, with a view to encouraging doctors to locate therein, may desire to hold their own examination and be less exacting than some other states in requirements for licensure, but there should be unanimity in the acceptance of the certificate of the National Board. The next examination of the National Board will be held the second week in February, 1924, and students wishing to take that examination should forward their applications to the Medical Arts Building, Philadelphia, on or before January 1.

THE sale of the Abrams paraphernalia leads us to comment upon the frequency with which doctors are swindled. As we often have stated, doctors as a class are willing dupes for most anyone who desires to profit through contact with them. Figuratively speaking, they buy "gold bricks" with real joy permeating their countenances when they do it. On the other hand, they are peculiarly immune to the importunities of those who could interest them in something really worth while. In evidence of their recognized credulity we point to the "sucker lists" of individuals and concerns selling fake stocks or bonds in which physicians' names lead the list of professions and vocations. Even in connection with his professional work, where he ought to use some discrimination in giving his stamp of approval, he listens to the glib detail man or promoter without taking the trouble to learn whether the story that is told is trustworthy, or the goods offered for sale are worthy of confidence. Last month we published an article in which attention was called to the real personal services that can be rendered

doctors by the American Medical Association, and the service covers practically everything that is of interest to the medical man in his everyday work, not omitting trustworthy judgment as to the reliability of certain investments. In a measure THE JOURNAL offers the same service, but what we especially desire to impress upon our readers is the fact that many so-called therapeutic remedies, as well as some appliances offered as an aid in medical practice, usually introduced by some glib detail man or salesman, are worthless or practically so. THE JOURNAL is asked to advertise many of them, but they fail to receive favorable consideration in view of the established policy to advertise only trustworthy products. While we especially desire that our readers shall patronize the advertisers in THE JOURNAL because what is advertised in THE JOURNAL is trustworthy, yet we desire to emphasize the importance of determining the merits of any new drugs or pharmaceutical preparations before employing them and this can be done by referring to the various publications of the American Medical Association covering the work of the Council on Pharmacy and Chemistry, and if not found there it is possible to obtain the desired information by writing directly to the American Medical Association office. In other words, "before you invest, investigate," and THE JOURNAL will help you to obtain correct advice whenever possible.

DEATHS

WINFIELD SCOTT MCNEILL, M.D., of Veedersburg, died October 27, at the age of 74 years.

W. M. FORD, M.D., of Mt. Auburn, died November 7, at the age of eighty years. Dr. Ford graduated from the University of Louisville, Medical Department, in 1877.

JUNE ABBOTT, M.D., died November 3 at his home in Batesville. Dr. Abbott was seventy-nine years of age. He graduated from the Eclectic Medical College of Cincinnati, in 1872.

HENRY HERR, M.D., of Washington, died November 19, at the age of 58 years. Dr. Herr graduated from the Miami Medical College, Cincinnati, in 1894. He was a member of the Daviess County Medical Society, the Indiana State Medical Association and the American Medical Association.

E. W. BURRIS, M.D., of Indianapolis, died November 20, aged forty-eight years. Dr. Burris was a graduate of the Medical College of Indiana, Indianapolis, in 1903. He was a member of the Marion County Medical Society, the Indiana State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

BURROUGHS, WELLCOME & COMPANY, of New York City, have moved to their new building at 9-11 East Forty-first street.

A DINNER in honor of the seventieth birthday of Dr. George W. McCaskey, of Fort Wayne, was given by his medical friends, November 9.

THE eleventh annual session of the Mississippi Valley Conference on Tuberculosis was held in Evansville, for a three-day session, beginning October 9.

THE Muncie Academy held its regular meeting at the Hotel Roberts, December 7. Dr. L. M. Warfield, of Ann Arbor, Michigan, presented a paper on "Hypertension".

THE Tri-County Medical Society held a meeting at Seymour, November 7. An illustrated lecture on "The Kidney" was presented by Dr. H. J. Farbach, of Louisville.

At the annual meeting held September 18 in Atlantic City, Dr. Sinclair Tousey, of New York, was elected president of the American Electrotherapeutic Association.

DR. and MRS. H. R. ALLEN, of Indianapolis, are taking an extended trip to the South Sea Islands. Dr. Allen expects to return to his practice about the first of May, 1924.

GEORGE W. WISHARD, M.D., formerly of Indianapolis, died October 8 at his home in Minneapolis as the result of a stroke of apoplexy. Dr. Wishard's body was brought to Indianapolis for burial.

THE 1924 session of the International Congress of Surgeons will meet in Rome. At the 1924 session the German language will be permitted, as well as English, French, Italian and Spanish.

DR. L. F. ROSS, of Richmond, has accepted the position of superintendent of the Eastern Indiana Hospital for the Insane to succeed Dr. S. E. Smith, who has assumed his new duties as provost of Indiana University.

THE American Association for the Study of Goiter, composed of goiter surgeons, pathologists, anesthetists, internists, and radiologists, will have its annual meeting in Bloomington, Illinois, the 23rd, 24th and 25th of January, 1924.

DR. E. L. CARTWRIGHT, of Fort Wayne, has announced that he has resigned the position of medical director of the General Electric Company of Fort Wayne and will devote his time exclusively to general practice in his new office at 1106 Taylor Street.

THE *American Journal of Roentgenology and Radium Therapy*, the official organ of the American Roentgen Ray Society and the American Radium Society, will appear in enlarged form in 1924. The magazine will contain more illustrations, more abstracts and more original articles. Dr. A. C. Christie is editor.

DR. EDMUND D. CLARK, of Indianapolis, was elected chairman of the Indiana Section of the American College of Surgeons at the meeting held in Fort Wayne, November 14th and 15th. Dr. E. E. Padgett, of Indianapolis, was made secretary and Dr. S. H. Clark, of South Bend, councilor. The next meeting of the Section will be held in Indianapolis.

A DINNER was given at the Hotel Commodore, New York City, December 4, by the Rockefeller Foundation in honor of a group of health officers representing eighteen foreign governments, who for the past three months have been in the United States under the auspices of the Health Section of the League of Nations for the study and observation of various types of public health organization.

LEGISLATION looking toward the establishment of an independent chiropractic examining board in Alabama was unanimously reported adversely by the committees of the house and senate at Montgomery, September 6. This represents final action. Rules were adopted in June giving chiropractors and other drugless healers limited rights to practice in the state, provided they pass the state medical board's examination.

At the annual meeting of the American Hospital Association, held recently in Milwaukee it was stated that the total expenditure annually for the maintenance of 6,000 hospitals is nearly \$525,000,000. It was stated also that the sum of \$350,000,000 would be spent during the next year for new buildings and equipment. The total value of hospital buildings and grounds in the United States is nearly \$2,000,000,000.

THE Indiana Institute on Nutrition will be held in Indianapolis, January 14th to 18th, inclusive. The Institute will be held under the auspices of the Indiana University Extension Division in cooperation with the Indiana Tuberculosis Association, the Marion County Tuberculosis Association and the Indiana State Board of Health. Enrollments are to be sent to Mr. M. A. Auerbach, 1134 Indiana Pythian Building, Indianapolis.

THE Tri-State District Medical Society, consisting of Iowa, Illinois, and Wisconsin, held its annual meeting in Des Moines, October 29 to November 1. At this meeting it was decided to change the name of the society to the Interstate, Assembly of Physicians and Surgeons, and to include the states of Minnesota, Indiana and Missouri. The next annual meeting will be held at Rochester, Minnesota. Dr. Clifford U. Collins, of Peoria, Illinois, was made president.

At the closing session of the Ohio Valley Medical Association, November 7, Dr. Leon L. Solomon, of Louisville, was elected president; Dr. Murray N. Hadley, of Indianapolis, first vice-president; Dr. Wm. C. Herman, of Cincinnati, second vice-president; Dr. James Y. Welborn, of Evansville, third vice-president; Dr. Benjamin L. W. Floyd, of Evansville, was re-elected secretary-treasurer. Evansville was selected as the 1924 convention city.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Butesin.

E. Bilhuber, Inc.:

Afenil.

Ampules Afenil.

Cutter Laboratories:

Diphtheria Antitoxin Globulin.

Glycerinated Vaccine Virus.

Gonococcus Vaccine.

Hoffman-LaRoche Chemical Works:

Iodostarin.

Chocolate Tablets Iodostarin-Roche.

Chocolate Tablets Iodostarin-Roche 0.25 Gm.

Parke, Davis & Co.:

Carbon Tetrachlorid (Human Use)—P. D. & Co.

SOCIETIES AND INSTITUTIONS

SHELBY COUNTY MEDICAL SOCIETY

The Shelby Medical Society met December 5, 1923, and elected the following officers: President, C. H. Perry, Lewis Creek, Ind.; vice-president, F. E. Ray, Shelbyville, Ind.; secretary and treasurer, F. E. Bass, Shelbyville, Ind.; delegate, B. G. Kenney, Shelbyville, Ind.; alternate, Walter McFadden, Shelbyville, Ind.; board of censors, Samuel Kennedy, Willard Parrish, of Shelbyville, and W. H. Cohee, Marietta, Ind.

F. E. BASS, Secretary-Treasurer.

INDIANA UNIVERSITY SCHOOL OF MEDICINE

The enrollment in the Indiana University School of Medicine this year is 346.

In 1918-19 the total was 200.

In 1919-20 the total was 230.

In 1920-21 the total was 244.

In 1921-22 the total was 266.

In 1922-23 the total was 328.

This is an increase of 78% in the past five years.

The enrollment in the year 1918-19 was lower than

it would have been because of the war. The enrollments since that time are probably abnormally large because of the war. Some students whose medical course has been interrupted by the war returned to school, while not a few became interested in medicine and turned to this profession because of experiences or contacts during the war which aroused their interest in this field of activity.

The low point of enrollment of medical students in America was reached in 1918-19. The high point was in 1904.

In 1904 there were some 165 medical schools in America with a total enrollment of 28,142 students and 5,747 graduates in that year.

In 1918-19 the number of medical schools had been reduced to 82, while the number of students enrolled had fallen to 13,052 with 2,656 graduating.

Since that date there has been an upward swing in enrollments so that in 1922-23 in the 81 medical schools now in the United States there were 17,432 students with 3,120 graduating last June.

This means that while medical enrollments as a whole have increased 33.5% since 1918-19, the enrollment in the Indiana University School of Medicine has increased 78%, which is two and one-third times the average.

This increase has come in spite of three qualitative increases in entrance requirements during these five years.

Since 1908 two years of collegiate work have been required for entrance in the Indiana University School of Medicine. An examination of records of the 25% of the Freshman Medical Class that failed of promotion showed that though all had done the two years of collegiate work, those who failed had the lowest passing grades in much of their premedical work. So the rule was adopted by the Educational Committee of the School that every matriculant must have an average grade of C* to secure admission.

This rule did not decrease the number of failures as much as anticipated. A further study of credentials showed that those who had failed had in many instances earned their average grade of C by high grade work in English and Modern Language, while they had done D grade work in premedical sciences. Since the Freshman Year of Medicine though different in subject matter is not essentially different in character from the premedical sciences, the failure was, at least in part, explained. So the second qualitative increase in entrance requirements was adopted by the Educational Committee calling for an average grade of C in premedical sciences.

Finally it was observed that although we almost never advertised our School in periodicals outside our state, an increasing number of students was coming to us from other states. Therefore a rule was adopted requiring that at least half of the work of students from states other than Indiana must be of at least B grade and the remaining half not less than C. The purpose of this rule is to insure so far as possible the matriculation of only those students who show evidence of scholastic accomplishment which seems to insure their ability to carry the work of the School of Medicine successfully.

Indiana University School of Medicine ranks seventeenth among the 81 medical schools in point of total enrollment. Last year we ranked tenth in point of freshman enrollment. Of the 485 Indiana boys studying medicine in some school last year, 300 of them, or 62%, were studying in the Indiana University School of Medicine. This is a relatively high percentage exceeded by only two of the larger schools: University of Minnesota, which enrolls 75% of the Minnesota boys who study medicine, and University of Nebraska, which enrolls 66% of the Nebraska boys who study medicine. Both of these states are relatively far distant from great

*Note: A equals 95-100%; B equals 85-94%; C equals 75-84%; D equals 65-74%.

medical centres. In both of these states the native sons must travel considerable distance to reach other medical schools, while Indiana borders on four old and long established medical centres. This is, therefore, a splendid vote of confidence of Indiana boys in our own state school.

Applications for matriculation in the Freshman Class of 1924 are already being received.

BURTON D. MYERS, Asst. Dean,
Indiana University School of Medicine.

THE STATE BOARD OF HEALTH

The Indiana State Board of Health is in full accord with the suggestion made by THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION that there should be complete understanding and full co-operation between the various state enterprises having to do with public health and public welfare and the Indiana State Medical Association, as the representative organization of the medical profession throughout the State. The State Board of Health recognizes that the confidence, good will, and the support of the medical profession is not only worth obtaining, but is absolutely essential to the successful carrying out of any program of public health. In fact, public health work cannot attain its fullest efficiency without the leadership of the medical profession. It is for this reason that the State Board of Health welcomes the opportunity to present to the medical profession of the State from time to time through the columns of THE JOURNAL facts that are of mutual interest, outlines of policy that are of mutual concern, reports of progress that should be mutually helpful, and in so doing invites from the medical profession of the State suggestions, criticisms, and discussions to the end that both the medical profession and the State Board of Health may have a common view point and a common interest in the things pertaining to a larger public service and public good.

The State Board of Health recently organized a Division of Communicable Diseases with Dr. H. W. McKane, formerly Director of the Division of Tuberculosis, at the head of the new Division, and Dr. Arthur L. Oilar, formerly connected with the International Health Board, as epidemiologist. The first work of the new Division will be to establish a system of weekly morbidity reports from each of the more than five hundred county, city, and town health officers of the State. These reports will cover the whole list of recognized communicable and reportable diseases and will constitute a weekly index of the prevalence of communicable diseases throughout the State. The Division will have the co-operation of the U. S. Census Bureau and the U. S. Public Health Service in collecting morbidity reports, thus extending to health officers and physicians the franking privilege in reporting cases of communicable diseases. Health officers are now being supplied with penalty report cards, while physicians are to be supplied through local health officers.

In order to have such a system of morbidity reporting complete and accurate, it will be necessary to have the co-operation of every physician in the State in making a prompt report to the health officer having jurisdiction of every case of communicable disease coming under the care of the physician. The State Board of Health feels certain that this effort to secure an accurate weekly index of communicable disease prevalence, both for the State and the National Government, will meet with a hearty and prompt response on the part of the physicians of the State of Indiana.

Through the epidemiologist it is the hope of the State Board of Health to extend to every community in the State the service of an expert in the investigation of outbreaks of epidemics of communicable diseases, in locating sources and carriers of infection, and in this way have the Division render the best possible service

to physicians, to health departments, and to communities, in the prevention and control of communicable diseases.

The December *Bulletin* of the State Board of Health will publish a brief statement of the work of the various divisions of the Board and the service which each division is prepared to render to physicians and to the public. A copy of the December *Bulletin*, which will be ready for distribution about January 1, will be sent to each physician in the State of Indiana, the purpose being to take this method of acquainting physicians with the work, the facilities, the methods, and the program of the Board in attempting to discharge its responsibility for the health and lives of the people of the State. It is believed that a statement of this kind showing the activities and purposes of the Board will go far toward bringing about a better understanding of the relationship of the State Board of Health to the medical profession, and the common relationship of both to the public. The Board endeavors to keep an up-to-date mailing list of all physicians in the State of Indiana, but if any physician should not receive a copy of the December *Bulletin*, a copy will be forwarded gladly upon request.

CORRESPONDENCE

PROPOSED STATE PSYCHIATRIC HOSPITAL

Richmond, Indiana, November 15, 1923.

Editor, THE JOURNAL:

From time to time I have noted with interest and approval your stand on the subject of State Medicine.

My early very warm feeling for the Riley Memorial Hospital has cooled somewhat. I find among my acquaintances no medical statistician who insists that "Indiana has 10,000 dependent crippled children awaiting admission to the Riley Hospital." Of the situation in regard to this institution I feel that you are fully advised and I mention it only as a part of a larger plan, all of which is essentially selfish in its conception and distinctly against public policy.

Under the guise of advancing by intensive treatment the interest of the insane and defective classes there will be introduced into our next legislature a bill providing for a Psychiatric Hospital, to be located in the College group, at Indianapolis.

I have discussed the needs of this institution with several of the men and women doing this work in the State's institutions, and the results are disquieting.

The plan seems to be: To commit by voluntary or forced legal commitment all presumably curable cases to this centrally located Psychiatric Hospital. Then to arrange a sort of a back-door discharge or transfer arrangement for those proving to be chronic and sending them to the particular one of the five existing hospitals for Insane serving the district in which the patients have legal settlement. The Hospitals for Insane receive from 8% to 11% of recoverable patients, but these are the patients furnishing the incentive for endeavor on the part of those doing the work. The recovery and home-going of these patients has a stimulating and heartening influence on many of the other less favorably constituted, giving them encouragement to do their best in their effort to get well. So from the standpoint of both patient and employee an institution for presumably curable would, in effect, place a sign over the door of the State Hospitals, caring for 90% of the insane, and that sign would read: "Abandon hope all ye who enter here."

The Psychiatric Hospital will, also, be urged as a teaching unit for the Medical Department of the State University. The Central Hospital for the Insane, the largest hospital for insane in the state, and an institution that has been giving instructions in psychiatry for more than twenty years, is located very close to the

Medical Department of the University, and, if its facilities are not ample for the needs of the school, they surely could be made so at a relatively small cost.

I am very strongly persuaded that if these facts are clearly presented to our overburdened tax payers the move contemplated can be controlled.

If you are advised of certain practices formerly alleged to exist in a general hospital, with a University connection, you will see additional unfortunate possibilities in the proposition under consideration.

Yours respectfully,

_____, M.D.

A SAMPLE OF CHIROPRACTIC TREATMENT

Fort Wayne, Indiana, November 16, 1923.

Editor, THE JOURNAL:

A sample of chiropractic treatment coming to my notice may be of interest to you.

Very recently I was called to see an unmarried woman who had been having chiropractic "adjustments" for the previous twelve months. The patient was anemic, suffering from amenorrhea, swelling of the extremities, and abdominal ascites; was receiving daily treatments from a chiropractor at so much "per." The abdomen was greatly distended and rigid. Just prior to my seeing the case the chiropractor had been called in great haste and during the progress of his "adjustments" much fluid, some streaked with blood, escaped per vagina. Gleefully, the patient was assured of the speedy return of her menstrual periods and recovery from her dropsical condition. During the day her abdominal pains increased in severity and I was called, and following an examination made a diagnosis of pregnancy with patient in active labor. The patient was at once removed to a hospital and shortly after delivered of twins.

The damnable feature of the case was that the chiropractor, according to the family's belief, had taken advantage of the girl and was responsible for her condition.

_____, M.D.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

DIPHTHERIA ANTITOXIN STANDARD (PURIFIED AND CONCENTRATED GLOBULIN).—Formerly marketed as diphtheria antitoxin concentrated (globulin) (see New and Nonofficial Remedies, 1923, p. 283). This brand of diphtheria antitoxin concentrated is also marketed in packages of one syringe containing 20,000 units. H. K. Mulford Company, Philadelphia.

DIPHTHERIA ANTITOXIN SUPERCONCENTRATED.—The product resembles serum antidiphthericum purificatum U. S. P. It differs in that the volume per thousand units is smaller, and the protein content is claimed to be lower. It is marketed in packages of one syringe containing, respectively, 1,000 units, 3,000 units, 5,000 units, 10,000 units and 20,000 units. H. K. Mulford Co., Philadelphia.

PROTEIN EXTRACTS DIAGNOSTIC-P. D. & Co.—In addition to the Protein Extracts Diagnostic-P. D. & Co. listed in THE JOURNAL Sept. 15, 1923, p. 929, the following have been accepted: Colon Bacillus Protein Extract Diagnostic-P. D. & Co.; Gonococcus Protein Extract Diagnostic-P. D. & Co.; Micrococcus Catarrhalis Protein Extract Diagnostic-P. D. & Co.; Pneumococcus, Type I, Protein Extract Diagnostic-P. D. & Co.; Pneumococcus, Type II, Protein Extract Diagnostic-P. D. & Co.; Pneumococcus, Type III, Protein Extract Diagnostic-P. D. & Co.; Pseudodiphtheria Bacillus Protein Extract Diagnostic-P. D. & Co.; Staphylococcus Albus Protein Extract Diagnostic-P. D. & Co.; Staphylococcus Aureus Protein Extract Diagnostic-P. D. & Co.; Staphy-

lococcus Citreus Protein Extract Diagnostic-P. D. & Co.; Typhoid Bacillus Protein Extract Diagnostic-P. D. & Co. Parke, Davis & Co., Detroit.

DIPHTHERIA TOXIN-ANTITOXIN MIXTURE (0.1 L+)-LEDERLE.—This product (see New and Nonofficial Remedies, 1923, p. 284) is also marketed in 30 Cc. vials. Lederle Antitoxin Laboratories, New York.—(*Jour. A. M. A.*, Oct. 27, 1923, p. 1441).

BUTESIN.—N-butyl-para aminobenzoate. Butesin is the normal butyl ester of 4-aminobenzoic acid. The actions and uses of butesin are similar to those of benzocaine (anesthesin), which is the ethyl ester of 4-aminobenzoic acid (see New and Nonofficial Remedies, 1923, p. 41. Anesthetics, Local, Difficultly Soluble). Butesin is used as a dusting powder, either pure or diluted. It may be used in the form of troches, ointment, suppositories or dissolved in a fatty oil. Butesin is a white, crystalline powder, odorless, tasteless, almost insoluble in water, but soluble in alcohol, chloroform, ether and in fatty oils. The Abbott Laboratories, Chicago. (*Jour. A. M. A.*, Nov. 3, 1923, p. 1523).

DIPHTHERIA ANTITOXIN GLOBULIN.—This product (see New and Nonofficial Remedies, 1923, p. 283) is also marketed in syringes containing 20,000 units. Cutter Laboratory, Berkeley, Calif.

GLYCERINATED VACCINE VIRUS.—This product (see New and Nonofficial Remedies, 1923, p. 293) is also marketed in packages containing one capillary tube. Cutter Laboratory, Berkeley, Calif.

GNOCOCCIC VACCINE.—A gonococcic vaccine (see New and Nonofficial Remedies, 1923, p. 304) marketed in vials of 5 Cc. and 20 Cc., each cubic centimeter containing 500 million cocci. Cutter Laboratory, Berkeley, Calif. (*Jour. A. M. A.*, Nov. 17, 1923, p. 1693).

AFENIL.—Calcium chloride urea. A molecular compound of calcium chloride and urea. Afenil has the actions of calcium chloride. It is claimed that when afenil solutions are administered intramuscularly or intravenously, the drug is better tolerated and less irritating than calcium chloride. It is claimed that the intravenous administration of afenil is indicated in hay fever, asthma and other diseases of the respiratory tract in anaphalactic conditions, skin rashes, urticarias and as a means of preventing severe arspenamine reactions. Afenil is marketed in ampules containing 10 Cc. of a 10 per cent. solution of afenil. E. Bilhuber, Inc., New York.

SILVER NITRATE SOLUTION IN CAPSULES-P. D. & Co.—An aqueous solution of silver nitrate contained in capsules composed of beeswax with an inner lining of a hard paraffin. The solution is intended for the prophylaxis of ophthalmia neonatorum in the newborn. The solution is marketed in two forms: capsules containing 6 minims of a 1 per cent. solution, capsules containing 6 minims of a 2 per cent. solution. Parke, Davis & Co., Detroit.—(*Jour. A. M. A.*, Nov. 24, 1923, p. 1789).

PROPAGANDA FOR REFORM

J. T. AINSLIE WALKER'S LATEST INTESTINAL DISINFECTANT.—About a year ago, a flood of reprints mailed from London reached the editors of American medical journals and others. The reprint dealt with "A New Suggestion in the Treatment of Puerperal Eclampsia" by Capt. J. T. Ainslie Walker. The reprint was to the effect that as "the problem of intestinal disinfection has been solved" rational treatment of the condition was greatly simplified, but it was not stated how the problem of intestinal disinfection had been solved. A few months later, the same editors received reprints which dealt with "Dimol" in the treatment of summer diarrhea in infants, and an article by A. N. M. Davidson. Still more recently, American medical editors have received a pamphlet mailed from England which purports to be

a book sent for review. This pamphlet is an obvious puff for Dimol by J. T. Ainslie Walker. Dimol is a preparation introduced by J. T. Ainslie Walker of England, and is sold in this country by the Anglo-French Drug Co. Some time ago Mr. Walker was connected with the Barrett Manufacturing Co. to exploit "Pyxol", a proprietary disinfectant resembling compound solution of cresol. Later Mr. Walker introduced his first "intestinal germicide" under the proprietary name "Trime-thol". This preparation, which was reported on unfavorably by the Council on Pharmacy and Chemistry, appears to have been very similar to the product now exploited as Dimol. Mr. Walker would have us believe they are different, but the American agent of Dimol makes this claim: "Dimol is the registered name for the product known in the U. S. A. in 1914 under the name 'Trime-thol'."—(*Jour. A. M. A.*, Oct. 6, 1923, p. 1224).

COLORLESS IODIN PREPARATIONS.—The so-called colorless iodine preparations do not contain iodine in the free state, but some form of combined iodine, chiefly iodic. For instance, *Tinctura Iodi Decolorata*, N. F., is a solution of sodium iodic and ammonium iodic obtained by mixing iodine and sodium thiosulphate, stronger ammonia water and alcohol. When tincture of iodine is used externally, it is with the view of obtaining the therapeutic action of free iodine. Since the colorless iodine preparations do not contain free iodine, their external use as a substitute for tincture of iodine is irrational. When tincture of iodine is given internally, the free iodine contained in it is converted into iodic before absorption. Therefore, tincture of iodine and the so-called colorless iodine preparations given internally have essentially the same therapeutic effect. However, if a colorless iodine preparation is to be administered, it would be simpler and more rational to administer sodium iodic.—(*Jour. A. M. A.*, Oct. 20, 1923, p. 1383).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the federal authorities charged with the enforcement of the Food and Drugs Act: Fisher's Uterine Tonic (Fisheropathic College Association), containing ammonia, traces of ammonium salts, including iodic and carbonate, vegetable extractives, glycerin and water. Fisher's Kidney Food (Fisheropathic College Association), containing a small quantity of vegetable extractives, citric acid, sugar, alcohol and water. San-Yak (Burnham Medical Co.), composed essentially of alcohol 7.0 percent, plant extracts, including cinchona and a laxative drug, 2.4 percent, and water 92.0 percent. Plough's Prescription C-2223 (Plough Chemical Co.), consisting essentially of potassium iodic, extracts of plant drugs, including colchicum, a trace of salicylic acid, glycerin, alcohol and anise flavoring. Chicawampa Tea (Chicawampa Tea Co.), consisting essentially of cut herbs, principally the *Ephedra nevadensis* (known locally as "Caynote" or "Canutlio") with small proportions of peppermint and sage.—(*Jour. A. M. A.*, Oct. 20, 1923, p. 1380).

THE ACTION OF ARSENICALS IN THE BODY.—Voegtlin and his associates in the Hygienic Laboratory of the U. S. Public Health Service have observed that certain compounds containing sulphur groups in the SH form are able to counteract the toxic effects produced by arsenoxid on trypanosomes and a representative mammal. They advance the theory that arsenic in certain trivalent forms is a specific poison for the SH group in the trypanosome organism, and that arsenic causes death of the cells by interfering with the oxidative processes. Voegtlin and his associates concluded that the failures reported in the treatment of the later stages of syphilis are due to the fact that arsphenamin, neoarsphenamin and silver arsphenamin lack the essential penetrative power for the infected tissues, and for this reason they do not reach the last parasites in sufficient amounts to cause their death. In the effort to secure a more complete sterilization of syphilitic patients in the more advanced stages of the disease, sulpharsphenamin, tryparsamid, and 3-am-

ino-4-oxyphenol arsonic acid are suggested for trial as remedies of superior penetrative power.—(*Jour. A. M. A.*, Oct. 27, 1923, p. 1442).

VAN ESS.—The Van Ess Laboratories, Inc., Chicago, put out "Van Ess Special Dandruff Massage" and "Van Ess Liquid Scalp Massage". "Van Ess" is sold with the claims that it will make hair grow and that it will stop falling hair in two weeks. The A. M. A. Chemical Laboratory reports that Van Ess Special Dandruff Massage is a perfumed liquid which separates into two layers on standing. The upper layer consists essentially of a petroleum oil which appears to be kerosene. The lower layer appears to be composed of water and alcohol containing small amounts of quinin sulphate, coloring matter and perfume. The Laboratory concludes that it is probable that a mixture of 35 parts of kerosene, 15 parts of alcohol denatured by the addition of 2 grains of quinin sulphate per fluidounce and 50 parts of water would have whatever therapeutic properties the Van Ess Special Dandruff Massage possesses.—(*Jour. A. M. A.*, Oct. 27, 1923, p. 1461).

THE MENACE OF "MOONSHINE" WHISKEY.—The untoward results of overindulgence in whiskey have usually been ascribed to its alcoholic content, although now and then ill-defined "by-products" of fermentation present in the distillate have been charged with a toxicity out of all proportion to the quantities ordinarily present. The indefinite "fusel oil" and furfural were often designated as the pernicious ingredients. In properly made and suitably aged whiskeys, such constituents could at most play only a minor part in the intoxication produced. While alcoholism is less prevalent today than it was a few years ago, its attendant and after effects on its victims are more serious. The impression is broadcast that this is due to the "moonshine" liquor which is being distributed. The danger from the presence of methyl alcohol in "moonshine" whisky is well-known. Its presence is explained by the use of denatured alcohol (which may contain methyl alcohol) in the preparation of "moonshine" whisky. However, the investigation of the federal authorities indicate that ordinarily methyl alcohol is not the pernicious constituent of illicit whisky, but instead the product has been found often to contain a high proportion of acetaldehyd. The "ranker" the liquor, the higher the aldehyd content. (*Jour. A. M. A.*, Nov. 10, 1923, p. 1611).

THE COMPOSITION OF SOME COMPLEXION CLAYS.—Next to nostrums sold for the alleged rejuvenation of the male, the most popular form of contemporary charlatanism lies in the exploitation of alleged beautifiers for the female. During the last year or two the cosmetic market has been glutted with a veritable avalanche of so-called complexion clays and face packs. The A. M. A. Chemical Laboratory has analyzed the following preparations of this class: "Terra-derma-lax," "Bonnicilla," "Domino Complexion Clay," "Mineralava," "Ryerson's Forty Minute Beauty Clay." The laboratory reports that each of the preparations was a bluish mass of the consistency of soft putty and resembled a mixture of clay and water. With one exception, no substance other than clay, water and perfume was found in the preparations. Domino Complexion Clay contained about five per cent. of glycerin and about 0.2 per cent. of a salicylate, probably sodium salicylate. The examination indicates that the clays analyzed are not high grade products, nor carefully purified before being used. (*Jour. A. M. A.*, Nov. 10, 1923, p. 1624).

PREGL'S SOLUTION.—It has been stated that Pregl's (isotonic) iodine solution is probably prepared by treating a solution of sodium carbonate with finely powdered iodine. When the iodine has dissolved, sodium chlorid is added and the solution diluted to a definite volume. The product is stated to contain sodium ions, free iodine, iodic ions, hypiodite and iodate ions—this in addition to the carbonate and chlorid. A proprietary brand of this solution is sold in Germany as "Presiod." All

favorable reports of the therapeutic use of Pregl's solution have had their genesis from apparently biased sources. (*Jour. A. M. A.*, Nov. 10, 1923, p. 1628).

IRIDINOL.—The Council on Pharmacy and Chemistry reports that about fifteen years ago "Iridium (Medicinal)" was put on the market by the Platinum Co. of America, and the same company manufactured "Iridinol" which was marketed by the P. H. Potter Chemical Co. (now P. H. Potter and Sons, Inc.) New York. Both products were, at that time, claimed to contain iridium and were marketed for a high price with grossly misleading claims for the efficacy of iridium as a therapeutic agent. Iridium (Medicinal) seems to have been abandoned, but Iridinol, advertised by P. H. Potter and Sons, Inc., as an "ethical preparation" continues to be sold. In the earliest advertising Iridinol was claimed to be a "nontoxic preparation of iridium." At that time the A. M. A. Chemical Laboratory was unable to detect the presence of iridium, and it was concluded that no very large amounts of iridium could have been present. Regardless of the presence or absence of iridium, there is not the slightest evidence for the therapeutic value of this metal in the conditions for which it is recommended by the exploiters of Iridinol. In the present advertising for Iridinol no definite claim is made for the presence of iridium. Instead the agents merely imply its presence. Iridinol is recommended by the exploiters in anemia, rheumatism, specific blood diseases, diseases of the nose and throat, of stomach organs, liver and kidneys, of the nervous system, diseases of children and as a systematic alternative. In view of the long-continued activities of P. H. Potter and Sons, Inc., for the use of Iridinol, the Council authorized publication of a report for the information of physicians who may be importuned to use it. (*Jour. A. M. A.*, Nov. 24, 1923, p. 1807).

WHOOPING COUGH VACCINE.—In a series of articles on biologic therapy prepared under the auspices of the Council on Pharmacy and Chemistry, W. C. Davison (The Journal, Jan. 22, 1921, p. 242) concluded a review of the use of pertussis bacillus vaccine thus: "In summing up the prolific and somewhat contradictory literature on this subject, it may be concluded that injections of Bordet-Gengou bacillus vaccines may have a slight though unreliable prophylactic effect, and that therapeutic inoculations are of practically no value. Further experiments are necessary to raise this procedure from the limbo of non-specific therapy." The Council on Pharmacy and Chemistry has accepted pertussis bacillus vaccine for New and Nonofficial Remedies, but states in regard to the usefulness of the product: "The evidence indicating that it is of value for either prevention or treatment is very questionable, and the reports are conflicting." (*Jour. A. M. A.*, Nov. 24, 1923, p. 1809).

BOOK REVIEWS

EMBRYOLOGY. By Charles W. Prentiss, late Professor of Microscopic Anatomy, Northwestern University Medical School, Chicago. Revised and Rewritten by Leslie B. Arey, Professor of Microscopic Anatomy, Northwestern University Medical School. Third edition, enlarged; 412 pages, with 388 illustrations, many in color. Philadelphia and London. W. B. Saunders Company, 1920. Cloth, \$5.50.

The necessity for another edition of this admirable treatise has resulted in the addition of new material as well as the recasting of much of the old. In fact by the conciseness of the descriptive matter and the profusion of excellent illustrations, this usually dry, though important, subject has here been made not only most instructive but very interesting as well.

PRACTICAL TUBERCULOSIS—A Book for the General Practitioner and Those Interested in Tuberculosis. By Herbert F. Gammons, M.D., Superintendent Wood-

lawn Sanatorium, Dallas, Texas; Assistant Instructor in Clinical Medicine, Baylor Medical College, Dallas, Texas; etc. Introduced by J. B. McKnight, M.D., Superintendent and Medical Director, Texas State Tuberculosis Sanatorium, Carlsbad, Texas. St. Louis, C. V. Mosby Company, 1921. Cloth, pp. 158. Price \$2.00.

This little volume is indeed well named practical, for it is just that insofar as it deals with condensed facts and premises upon which the general practitioner must operate in dealing with tuberculosis. Many points are well taken, such as the advice to quit looking for early diagnosis but rather try to find active tuberculosis; the use of tuberculin in any form for diagnosis is both unreliable and dangerous; and lastly do not forget that Nature has cured many tuberculous persons, and that medicines, vaccines and serums have killed more patients than they have cured.

The x-ray pictures in the book have suffered materially in their reproduction.

THE BIOLOGY OF DEATH. By Raymond Pearl, of Johns Hopkins University. Octavo of 275 pages. Cloth. \$2.50. J. B. Lippincott Company, Philadelphia and London

This book really represents a series of lectures delivered at the Lowell Institute in Boston in December, 1920. It constitutes one of the monographs on experimental biology, edited by the Roosevelt Institute, Columbia University and Harvard University. The author has brought together under a unified viewpoint some of the more important contributions which have been made to our knowledge of natural death from three widely scattered sources; namely, general biology, experimental biology and statistical and actuarial science. The subject is an interesting and fascinating one, and it is a study necessarily involving an insight into many sciences. The author describes death as a result of physico-chemical changes in the cell or organism and these changes are in accordance with ordinary physico-chemical laws and principles. The time at which natural death occurs is determined by the combined action of heredity and environment. In general, the author discusses the following questions: Why do living things die? What is the meaning of death and the general philosophy of biology? Why do living things die when they do? What factors determine the duration of life in general, and in particular, and what is the relative influence of each of these factors in producing the observed result? An analysis of the store of biological knowledge gives the author the opportunity to discuss in an interesting and entertaining way the meaning of death and the determination of longevity. As an incident to the discussion it is shown that absolutely authentic instances of human survival beyond a century are extremely rare and that the common idea that whales and elephants obtain great longevity appears to be not well founded.

THE TONSILS. By Harry A. Barnes, M.D., Instructor in Laryngology, Harvard Medical School. Second edition. 217 pages. 45 illustrations. Cloth, \$5.00. C. V. Mosby Company, St. Louis, 1923.

We had occasion to comment favorably on the first edition of this book published nine years ago, and this entirely new and revised edition again meets with our approbation. The book gives in concise form the facts concerning the lymphoid tissues of the throat, their relationship to systemic disturbances, and the various operative procedures offered for their eradication.

THE EXCEPTIONS

"Do cucumbers distress all people, doctor?"
"No, madam; only those who eat them."—*Boston Transcript.*

INDEX TO VOLUME XVI

ORIGINAL ARTICLES	PAGE		PAGE
A		F	
Abdominal Cavity, Crochet Needle in.....	204	FORDYCE, JOHN A., New York City (The Treatment of Syphilis).....	226
Abdominal Cavity, Drains and Drainage of the.....	173	FOXWORTHY, FRANK W., Indianapolis (Diagnosis of Duodenal Ulcer).....	192
Abscesses, Intra-Abdominal, A Safe Method for Drainage of.....	6	(Fractional Hazards).....	129
Accessory Sinuses, Nasal, Infections of the.....	271	(Medical South America).....	383
ALLEN, H. R., Indianapolis (The Surgical Engineer).....	165	G	
ARTHUR, IRVIN, Patoka (The Medical Profession and the People).....	369	GASTINEAU, F. M., Indianapolis (Administration of Neoarsphenamine Without the Presence of a Third Party).....	95
Arythmia.....	14	(Porokeratosis).....	274
AUSTIN, M. A., Anderson (Fracture Hazards).....	129	GIORDANO, ALFRED S., South Bend (The Frequency of Thymic Hyperplasia in Toxic and Non-Toxic Goiters).....	362
B		Gonorrheal Infection of the Female Genitalia.....	392
BAXTER, SAMUEL M., New Albany (Infections of the Nasal Accessory Sinuses).....	271	GOOD, CHARLES H., Huntington (Our Medical Profession and Its Achievements).....	325
BEALL, CHARLES G., Fort Wayne (Insulin).....	279	(The Ideals of the Medical Profession).....	15
BOONE, JOHN C., South Bend (Streptococcus Hemolyticus Infection of the Nose, Accessory Sinuses and Mastoid Cells).....	249	H	
BOYD-SNEE, HARRY, South Bend (Otitic Meningitis) (Third Paper on Symposium on Meningitis).....	37	HARSHMAN, L. P., Fort Wayne (Diphtheria Control).....	389
BRENNER, I. E., Winchester (Arythmia).....	14	Heart Disease: Its Modern Conception and Treatment.....	113
BULSON, ALBERT E. JR., Fort Wayne (Acute Mastoiditis).....	276	HENRY, ALFRED, Indianapolis (The Treatment of Pulmonary Tuberculosis).....	9
(Cycloplegics in Refraction Work).....	198	Hip Joint, Diseases and Injuries of the.....	92
C		HUGHES, W. F., Indianapolis (Cataract Extraction and Complications).....	79
Cancer of the Esophagus.....	281	HUMES, CHARLES D., Indianapolis (Sugar in Cerebro-Spinal Fluid).....	94
Cancer, The Medical Practitioner and the American Society for the Control of.....	135	Hypertension and Nephritis.....	241
CAREY, W. W., Fort Wayne (Physiotherapy).....	335	I	
CARR, JAMES G., Chicago (Hypertension and Nephritis).....	241	Insulin.....	279
Cataract Extraction and Complications.....	79	K	
Cerebro-Spinal Fluid, Sugar in.....	94	KISER, EDGAR F., Indianapolis (Digitalis Therapy).....	220
CHAMBERLIN, WILLIAM B., Cleveland (The Endonasal Operation of the Lacrimal Sac).....	42	L	
Childbirth Injuries, Perineal Genito-Urinary, Reconstruction of.....	84	LINGEMAN, BYRON N., Crawfordsville (Laryngeal Diphtheria in the Smaller Communities).....	248
Chiropractic Philosophy.....	282	M	
CREGOR, FRANK W., Indianapolis (Administration of Neoarsphenamine Without the Presence of a Third Party).....	95	MARSHALL, G. D., Kokomo (Diseases and Injuries of the Hip Joint).....	92
(Porokeratosis).....	274	Mastoiditis, Acute.....	276
CURTNER, M. L., Vincennes (Drains and Drainage of the Abdominal Cavity).....	173	McALEXANDER, R. O., Indianapolis (Crochet Needle in Abdominal Cavity).....	204
CUTHBERT, F. S., Kokomo (System and Thoroughness in Eye Examinations and Treatment).....	169	McCASKEY, C. H., Indianapolis (A Brief Review of Otology to the Beginning of the Nineteenth Century).....	132
Cycloplegics in Refraction Work.....	198	McCASKEY, G. W., Fort Wayne (Heart Disease: Its Modern Conception and Treatment).....	115
Cystocele, Radical Cure of.....	333	(Insulin).....	279
D		McGINNIS, EDWIN, Chicago (Conservation in Ethmoid Surgery).....	359
Digitalis Therapy.....	220	Medical Profession:	
Diphtheria.....	387	The Ideals of the.....	15
Diphtheria Control.....	389	Our, and its Achievements.....	325
Diphtheria, Laryngeal, In the Smaller Communities.....	248	and the People.....	369
Dyspnea, Some Types of.....	217	Memoriam, In, of Dr. Albert Carl Kimerlin and Dr. Frank Barbour Wynn.....	75
DUBOIS, C. C. Warsaw (Diphtheria).....	387	MENDENHALL, A. M., Indianapolis (Occiput Posterior).....	121
E		Meningitis, The Differential Diagnosis of.....	33
EASTMAN, JOSEPH RILUS, Indianapolis (A Safe Method for Drainage of Intra-Abdominal Abscesses).....	6	Meningitis, Treatment of.....	36
Engineer, The Surgical.....	165	Meningitis, Otitic.....	37
Esophagus, Cancer of the.....	281	MIX, C. M., Muncie (Adenoma of the Prostate Gland).....	222
Eye Examinations, System and Thoroughness in, and Treatment.....	169	(Radical Cure of Cystocele).....	333
Eyes, Drainage of the.....	250		

	PAGE		PAGE
N		W	
Neoparsphenamine, Administration of, Without the Presence of a Third Party.....	95	WALKER, FRANK C., Indianapolis (Reconstruction of Perineal Genito-Urinary Childbirth Injuries) ..	84
NEW, C. F., Indianapolis (The Differential Diagnosis of Meningitis). (First paper of Symposium on Meningitis)	33	WISCH, LOUIS J., Whiting (Paratyphoid in a Baby) ..	204
O		WISHARD, WM. N., Indianapolis (In Memoriam of Dr. Albert Carl Kimberlin and Dr. Frank Barbour Wynn)	75
Occiput Posterior	121	WYNE, JAMES A., Indianapolis (Sensitivity to Epidermal and Pollen Proteins; Diagnosis and Treatment)	1
Otology, A Brief Review, to the Beginning of the Nineteenth Century.....	132	(Some Types of Dyspnea).....	217
P		Y	
PADGETT, E. E., Indianapolis (Tuberculosis of the Female Generative Organs).....	157	YOUNG, SIMON J., Gary (Some Observations on Gallbladder Surgery)	50
Para-Nasal Sinus Infection, The Association of, with Broncho-Pulmonary Disease	366	EDITORIALS	
Paratyphoid in a Baby.....	204	A	
Pharyngeal Infection, Phases of Chronic.....	161	Abram's Cult, What Los Angeles Thinks of the.....	209
Physiotherapy	335	Accounts, Collect Your Own.....	343
Porokeratosis	274	American College of Surgeons, Fellowship Pledge ..	
PORTER, MILES F., Fort Wayne (Cancer of the Esophagus)	281	A. M. A., Criticism of the.....	139
(The Rights and Duties of the Surgeon).....	189	A. M. A., San Francisco Session of the.....	255
PORTER, MILES F. JR., Fort Wayne (Treatment of Meningitis). Second paper of Symposium on Meningitis)	36	A. M. A. Service	372
(Insulin)	279	Anemia, Pernicious	309
Prostate Gland, Adenoma of the.....	222	Anti-Vivisectionist Science	178
R		B	
REPASS, R. E., Indianapolis (The Association of Para-Nasal Sinus Infection with Broncho-Pulmonary Disease)	366	Bureaucratic Government	101
ROMBERGER, FLOYD T., Lafayette (Observations on Surgery and Surgical Technique).....	329	C	
ROOPE, A. C., Columbus (Thyroid Disease).....	125	Charity, Medical	98
RUSH, J. E., Field Director, American Society for the Control of Cancer. (The Medical Practitioner and the American Society for the Control of Cancer).....	135	Chiropractic, Big Business Does not Recognize.....	257
S		Chiropractic Maltreatment	398
Sac, Lacrimal, The Endonasal Operation of the.....	42	Chiropractic Students, The Uplifters Assist.....	176
Sensitivity to Epidermal and Pollen Proteins; Diagnosis and Treatment	1	Co-operation, Need of, In Medical Activities.....	371
Sinuses, Accessory, Nasal, Infections of the	271	Couicism	21
South America, Medical	383	D	
SPOHN, G. W., Elkhart (Drainage of the Eyes)	250	Doctors Get Trimmed.....	398
Streptococcus Hemolyticus Infection of the Nose, Accessory Sinuses and Mastoid Cells	249	Dues Are Raised.....	342
STYGALL, J. H., Indianapolis (Essentials in Diagnosis and Treatment of Pulmonary Tuberculosis) ..	89	E	
Surgery, Ethmoid, Conservation in	359	Educating the Public in Illinois	206
Surgery, Observations on and Surgical Technique ..	329	Ethics, Increasing Respect for Our Code of.....	371
Surgery, Gallbladder, Some Observations on	50	Exhibitors, Objectionable, At Medical Conventions ..	208
Surgeon, The Rights and Duties of the	189	F	
Syphilis, Diagnosis in Early	96	Fellowship Pledge of the American College of Surgeons	397
Syphilis, The Treatment of	226	G	
T		Genius, The Reward of	310
THEWLIS, MALFORD W., Providence, Rhode Island (Chiropractic Philosophy)	282	Government, Bureaucratic	101
Thyroid Disease	125	H	
Thymic Hyperplasia, Frequency of in Toxic and Non-Toxic Goiters	362	Hearing, Functional Test of.....	18
TOMLIN, WM. S., Indianapolis (Phases of Chronic Pharyngeal Infection)	161	Hospital Day, National	144
Tuberculosis, Pulmonary, The Treatment of	9	Hospital Standardization	372
Tuberculosis, Pulmonary, Essentials in Diagnosis and Treatment	89	Human Life, Longevity of.....	396
Tuberculosis of the Female Generative Organs	157	"Hygeia," Let's Push	343
U		I	
Ulcer, Duodenal, Diagnosis of	192	Income Tax Provisions for Doctors.....	58
ULMER, DAVID, Terre Haute (Gonorrheal Infection of the Female Genitalia)	392	Innocents, The Slaughter of the	21
		Innocents, The Slaughter of the	138
		Insulin	255
		K	
		Kolmer's Technic, The Merit of, in the Serological Diagnosis of Syphilis	175
		L	
		Laboratories, Standardizing Medical	55
		Lay Readers, A Medical Journal for	22
		Longevity of Human Life	396

	PAGE		PAGE
M		D	
Medical Education and Practice, Some Problems in	256	Davisson, Henry C.	264
Medical Ethics, The Need of	256	Deavis, Daniel P.	264
Medical Knavery and Incompetency	101	Diven, Charles E.	235
Medical Legislation Proposed	20	Drake, F. J.	318
Medical Practice, Team Work in	206	Drake, Thomas A.	212
Medical Profession in Legal Matters, The Indifference of	19	F	
Medical Society, The, and the Rights of the Community	231	Falk, Frederick	212
Medical Testimony in Court	231	Fall, William D.	26
Medicine Prescribing Spectacle Venders	399	Fleming, Harry G.	183
N		Ford, W. M.	402
Neoparsphenamine Potency, Variability of	19	Frank, Ortho P.	26
O		Freeman, Joseph	110
Obstructionists, Society Should Protect Itself From	343	G	
P		Gard, Oliver	264
People, For the—Not for the Doctors	231	Gerard, Roy H.	213
Postgraduate Work by Our Medical Societies	396	Ginther, David	109
President, Our	309	Gray, Frank P.	64
Q		Gregory, Henry	348
Quarantine, Abolish Smallpox	57	H	
S		Herr, Henry	402
Sheppard-Towner Act, The	140	Hillis, James D.	64
Socializing Medicine	229	Hopkins, William G.	64
Specialists, Fixing Requirements for	56	Hudson, B. F.	212
Spectacle Venders, Medicine Prescribing	399	Hurt, George K.	212
State Health Commission Policy, The Need of a	177	Hutcheson, Henry A.	110
State Laboratories, Socializing Our	176	Hutner, Charles A.	183
Sterilization Laws, Eugenic	140	J	
Syphilis, Bismuth Treatment of	138	Jeter, Frank	212
Syphilis, The Merit of Kolmer's Technic in the Serological Diagnosis of	175	K	
T		Kidd, Gideon P.	318
Tax, An Outrageous, on Physicians	208	Kitchen, William B.	235
Terre Haute Session, The	341	L	
Testimony, Medical, In Court	231	Lindley, L. Fisher	213
Thain Case, The	98	Linegar, John M.	151
Thain Case, Dr. Gott's Version of the	100	Lukenbill, O. C.	26
Tonsillectomy, Indications and Contra-Indications	340	M	
Tonsillectomy Results	229	Mathews, James	213
W		Mauring, Nathaniel H.	212
Wassermann, Tye, As a Basis of Treatment	175	McCann, Joseph D.	264
Wassermann, Reaction, The Clinical Value of	18	McDonald, Arthur J.	318
Wassermann, Test, Standardizing the	98	McNeill, Winfield Scott	402
DEATHS		Merson, U. S.	151
A		Metcalf, Dean D.	26
Abbott, June	402	Morgan, Frank B.	110
Adkins, John C.	264	N	
B		Nieschang, Charles Clemenceau F.	379
Baughman, John N.	183	Nolan, Charles N.	64
Beeler, Jerome S.	26	Nusbaum, W. H.	109
Blount, R. F.	26	O	
Bogart, John H.	318	Oder, Edwin E.	318
Bridges, A. P. W.	151	P	
Bruce, T. E.	213	Parker, Abraham	348
Bruner, Emory Watson	151	Perry, Howard Samuel	26
Bryan, Tony L.	110	Peyton, David C.	110
Buehler, Jacob	379	Preston, Howard Paul	26
Burris, E. W.	462	Prunk, Daniel H.	318
Byers, R. S.	183	R	
C		Rankin, T. B.	151
Calvert, R. H.	264	Rawley, James A.	213
Carney, John W.	264	Rennoe, Callie A.	110
Casey, William M.	109	S	
Chittick, Charles	183	Sharp, Walter N.	151
Chitwood, Frank A.	348	Shellhase, Frederick W.	235
Clark, Charles S.	109	Sledd, Samuel D.	264
Collins, L. P.	379	Smith, John L.	64
Cook, Charles P.	64	Stevens, Orfila L.	348
		Studley, Joseph W.	318
		Surgace, Orlando B.	318
		Swarts, Vesta	318

	PAGE
T	
Teague, Albert E.....	213
Thomson, John Ferguson.....	264
Thurston, J. M.....	213
Turman, Ira L.....	348
V	
Varner, G. W.....	213
Vaughn, Iris J.....	264
Von Barandy, Oscar.....	109
W	
Ward, John P.....	379
Weaver, Odell.....	64
Whery, William P.....	212
Willeford, G. A.....	235
Williams, Luke P.....	379
Wilson, Milton C.....	64
Wisner, William E.....	109

CORRESPONDENCE

A	
Actinomycosis, Case Reports of Human, Requested	33
C	
Chiropractic Treatment, A Sample of.....	406
Christian Science.....	357
I	
Indiana Medical Profession, A Nurse's Opinion of the.....	381
L	
Laboratory Service by the State, Free.....	68
M	
Medical Information, The Bureau of.....	70
Medical License, Fraudulent Use of.....	320
N	
Nursing Problems.....	33
P	
Psychiatric Hospital, Proposed State.....	405
R	
Readers, Should Editors Protect Their.....	320
Riley Memorial Hospital, Pay Beds in the.....	382
S	
Standardization, Some Reflections on.....	382
V	
Veterans' Bureau, Procrastination and Inefficiency of the.....	356

SOCIETY PROCEEDINGS

C	
Councilors' Membership Contest.....	28, 67, 113
Councilor District:	
Fourth.....	215
Tenth.....	216
Eleventh.....	216
Thirteenth.....	356
Seventh.....	381
F	
Floyd County.....	32
G	
Grant County.....	320
H	
Hospital and Medical College Affairs, Report of Committee on.....	28

I	
Indiana Hospital Association.....	186
Indiana State Board of Health.....	
Indiana State Medical Association.....	67, 237, 267
Indiana State Medical Association—Secretary's Report.....	300
Indiana State Medical Association—Treasurer's Report.....	300
Indiana University School of Medicine.....	
J	
Jay County.....	215, 238
K	
Knox County.....	68
M	
Muncie Academy of Medicine.....	113, 215, 237
O	
Orange County.....	33
S	
St. Joseph County.....	154
Sullivan County.....	33
Shelby County.....	404
T	
Tippecanoe County.....	31
W	
Wabash County.....	356
Wayne County.....	215
Wells County.....	32

BOOK REVIEWS

A	
Anaphylaxis and Anti-Anaphylaxis. Their Experimental Foundations (Besredke).....	240
Anatomy and Physiology (Bundy).....	240
Anesthesia, Regional (Labat).....	358
Anesthesia, Regional (Sherwood-Dunn).....	32
B	
Bacteriology, General, Pathological and Intestinal (Kendall).....	240
Biochemistry, Principles of (Robertson).....	240
Bones and Joints, Inflammation of (Ely).....	324
Bronchoscopy and Esophagoscopy (Jackson).....	73
C	
Cerebro-Spinal Fluid in Health and Disease (Levinson).....	240
Chemistry, Applied (Peters).....	74
Clinical Medicine, Tuesday's Clinic at the Johns Hopkins Hospital (Barker).....	216
Clinics and Collected Papers of St. Elizabeth's Hospital, Richmond, Va.....	324
Composition of Certain Patent and Proprietary Medicines (Street).....	270
D	
Death, The Biology of (Pearl).....	408
Diabetic Manuel, for the Mutual Use of Doctor and Patient (Joslin).....	32
Diabetic Patients, A Primer for (Wilder, Foley, Ellithorpe).....	240
Disease, How We Resist (Broadhurst).....	382
E	
Electro-Therapist, The Note-Book of an (Waggoner).....	358
Embryology (Prentiss).....	408
Epidemiology and Public Health (Vaughn).....	324
Evolution, I believe in God and (Keen).....	72
Eye, Diseases of the (Parsons).....	358
G	
Gall Tract, Non-Surgical Drainage of the (Lyon).....	324
Gland Stealers, The (Bertram Gayton).....	74

(Continued on Adv. Page xx)

Peptone Solution (Armour)

5%. Isotonic—Sterile



Pituitary Liquid $\frac{1}{2}$ c c, 1 c c ampoules.

Suprarenalin Solution 1 oz. g. s. bottles.

Corpus Luteum, true substance.

Thyroids, standardized for iodine content.

Elixir of Enzymes, digestant and vehicle.

Suprarenal Cortex—powder and tablets, free from active principle.

As an aid in immunization and desensitization. Used hypodermatically in Migraine, asthma and other allergies with satisfactory results.

This Solution is prepared from a special product consisting of primary and secondary proteoses and peptone. It is free from histamin and other toxic substances.

Peptone Solution (Armour) 1 c. c. ampoules, 12 in a box.

Literature on Request

ARMOUR AND COMPANY

CHICAGO

HEADQUARTERS FOR THE ENDOCRINES

WALLACE-SOMERVILLE SANITARIUM

Succeeding the Pettey & Wallace Sanitarium

MEMPHIS, TENN.

WALTER R. WALLACE, M.D.
WILLIAM G. SOMERVILLE, M.D.

FOR THE TREATMENT OF

**DRUG ADDICTIONS, ALCOHOLISM
MENTAL AND NERVOUS DISEASES**

Located in the Eastern suburbs of the city.
Sixteen acres of beautiful grounds.
All equipment for care of patients admitted.



Louisville Neuropathic Sanatorium

INCORPORATED

1412 South Sixth Street, Louisville, Kentucky

and Nervous Diseases. Situated in residence portion of the city, yet quiet and retired. Rates furnished upon request.

W. E. GARDNER, A.B., M.D.
Medical Director

W. E. RENDER, M.D.
Resident Physician



INDEX

(Continued from Page 414)

	PAGE		PAGE
		P	
H		Parasites, Animal and Human Disease (Chandler) ..	240
Heart in Modern Practice, Diagnosis and Treatment (Reid) ..	270	Physical Diagnosis (Rose) ..	73
Henele, The Life of Jacob (Robinson) ..	74	Physiology of the Mind, An Essay on (Dercum) ...	358
How to Get What You Want (Marden) ..	72	Pitfalls (Caffrey) ..	73
Hughes' Practice of Medicine (Scott) ..	358	Practical Medicine Series for 1921 (Mix) ..	114
I		Practical Medicine Series, Vol. IV. Pediatrics. (Abt) ..	32
Invalids and Convalescents, Physical Exercises for (Ochsner) ..	358	Preventive Medicine, Practice of (Fitzgerald) ..	270
L		R	
Laboratory Methods, Clinical (Haden) ..	240	Rhine, The Riddle of the (Lefebure) ..	270
Legal Medicine and Toxicology (Peterson, Haines, Webster) ..	240	S	
M		Surgery, Essentials of (McDonald) ..	324
Medical Treatment, Principles of (Shattuck) ..	73	T	
Medicine, General (Mix) ..	358	Tonsillectomy, By Means of the Alveolar Eminence of the Mandible and a Guillotine (Sluder) ..	382
N		Tuberculosis, Practical ..	408
New and Nonofficial Remedies, 1922 (Council on Pharmacy and Chemistry of the A. M. A.) ..	32	Tuberculosis in Infancy and Childhood (Gittings-Knowles-Ashhurst) ..	156
New and Nonofficial Remedies, 1923 (Council on Pharmacy and Chemistry of the A. M. A.) ..	240	Tonsils, The (Barnes) ..	408
Nomenclature of Standard Diseases and Pathological Conditions, Injuries, and Poisonings for the U. S. (Department of Commerce, Bureau of Census) ..	32	W	
Nose and Throat, Diseases of the (Coakley) ..	114	Washington University School of Medicine, Collected Papers from the ..	324
Nursing and Nursing Education in the United States (Report of the Committee for the Study of Nursing Education) ..	324		
O		FEARS EXPOSURE	
Obstetrics, The Place of Version in (Potter) ..	73	Dr. Simms: I'll take an x-ray picture of your stomach. You would be amazed to know what wonderful things we find with that wonderful invention.	
		Mr. Stubbs (to himself): Great Scott! That bottle on my hip is sure to show in the picture— <i>Medical Pickwick.</i>	

Post Graduate Hospital and Medical School

2400 SOUTH DEARBORN STREET, CHICAGO, ILL.

—Offers—

SPECIAL COURSES

In All Branches

CLINICAL COURSE FOR GENERAL PRACTITIONERS

SPECIAL INSTRUCTION IN THE USE OF INSULIN

OPERATIVE SURGERY ON CADAVER AND DOGS

By Prof. W. J. Marvel, M.D.

Laboratory and X-Ray Training for Physicians and Technicians

Prof. B. C. Cushway, D.D.S., M.D. in charge of X-Ray Dept.

Graded Courses for Those Intending to Specialize in

EYE, EAR, NOSE AND THROAT

SHORT COURSES FOR SPECIALISTS

New and Enlarged Equipment for These Departments

Write for further information





X63-3146

Indiana state medical association.
Journal.
v.16, 1923.

DATE	ISSUED TO

X63-3146

Indiana state medical association. Journal.
v.16, 1923.

RETURN THIS BOOK ON OR BEFORE LAST DATE STAMPED

--	--	--	--

